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CONTENTS.

EDITORIALS :	PAGE.
The Metallurgical Mother Goose.—VI.	1
"The Conditions of Success"	1
The U. S. Geological Survey	1
Surgery Extraordinary	1
New Publications	2
The Sierra Nevada and Union Consolidated Bonanza	2
The Mineral Statistics of Great Britain for 1878	3
Sulphuric Acid and Alkali	5
Sinking and Tubbing at Whitburn Colliery.	5
Montana Mining Notes	7
PROGRESS IN SCIENCE AND THE ARTS :	
Malleable Nickel and Cobalt	6
Geographical Discoveries in the State of New York	6
Magic Mirrors	6
A Novelty in Lamps	6
Chemical Notes	6
The Value of Aluminium	6
The Lesseps Panama Interoceanic Canal	6
On the Same Topic	6
The St. Gothard Tunnel	7
The Record of New Railroad Construction	7

NOTES :	PAGE.
Incorporation of the Steam-Heating Project	4
Immigration Increasing	5
Condition of Collieries	5
Strike of Pennsylvania Coal Miners	7
The Labor Question Abroad	7
A Terrible Colliery Explosion in Scotland	7
GENERAL MINING NEWS :	
California	7
Colorado	8
Georgia	8
Missouri	8
Montana	9
Nevada	9
New Hampshire	9
Utah	9
NEW PATENTS	9
PROPOSALS	9
STATISTICS OF COAL PRODUCTION	10
THE COAL TRADE REVIEW	10
FREIGHTS	11
IRON MARKET REVIEW	11
METALS	11
BULLION MARKET	12
FINANCIAL :	
Gold and Silver Stocks	12
The Coal Stocks	14
Gas Stocks	16

THE METALLURGICAL MOTHER GOOSE.—VI.

Hey diddle diddle, the wild-cat fiddle,
The stock jumped over the moon ;
The little bulls laughed to see the sport,
But the bears got away with the spoon. *

W. S. KEYES, E.M., is taking a leading part in the Iron mine suit at Leadville.

"THE CONDITIONS OF SUCCESS."

The *Bulletin* of July 2d contains the following piece of friendly criticism :

"Dr. RAYMOND, one of the editors of the ENGINEERING AND MINING JOURNAL, delivered an elaborate address before the Alumni of Lehigh University, at Bethlehem, on June 18th. The address might have been delivered by a D.D., instead of by a Ph.D., but we have read it clear through to the end, nevertheless. Upon the whole, we are inclined to think, Doctor, that you ought to have told the young gentlemen that this is the year of grace and of progress, 1879, instead of stuffing them with those old saws about 'decision of character' and other 'conditions of success' with which they have long been familiar. But tastes differ, and we would not be regarded as criticising the address itself—only the choice of its subject. When ABRAHAM LINCOLN first heard a lecture by ARTEMUS WARD, he remarked, in his own droll way, that 'for those that like that kind of a lecture that's the kind of a lecture that those people would like.' So we might say of Dr. RAYMOND'S address—we don't like its kind ; others may. We looked for something fresher from you, Doctor—the practical man that you are—'the bold commander that you are.'"

We sympathize with the disappointment of our contemporary. He has been accustomed to get occasionally from Dr. RAYMOND admonitions a good deal "fresher" than any thing he could have found in the Bethlehem address. But he didn't like them : on the contrary, he used to get very angry about them, and call names. On the present occasion, we beg him to remember that the remarks which he deems inappropriate were addressed to young persons who have not yet achieved success or suffered defeat, and that for such, the subject may possess an interest which it lacks for editors of *Bulletins*, and the like, whose greatness is already assured and acknowledged. No doubt there are plenty of people who would be bored by Dr. RAYMOND'S address (though, if they *will* "read it clear through to the end, nevertheless," we must say, frankly, it is their own fault). They can easily be accommodated, however, by finding some lecturer after the *Bulletin's* ideal, who will tell them it is the year of grace 1879, and repeat the old, old story about ABRAHAM LINCOLN. There may be individuals still extant who can find "freshness" in that narrative—or, at least, in the narrator.

In one point we must make bold to correct a misconception on the part of the critic. If he will inform himself as to the meaning of "Ph.D.," the free institutions of this country, and the proprieties of public addresses, he will find that the cabalistic letters which have misled him do not prevent the man who wears them from speaking his mind on any subject. If what he says "might have been said by a D.D.," it is good evidence of its candor and sincerity. Suppose the *Bulletin* should occasionally try the D.D. style ! *

THE U. S. GEOLOGICAL SURVEY.

A bill passed Congress the other day, authorizing the operations of the national geological survey to be extended into the several States—we presume on condition of the consent of the "sovereign governments" thereof. There is no doubt that such consent will be freely given. The States are not at all jealous of Federal interference when it comes in the guise of "internal improvements" and gratuitous services. And we understand that Mr. KING intends to do something in Tennessee, this year.

The effect of such a beginning will probably be, on the whole, unfavorable to the interests of science. There will be little inducement for the States to inaugurate or maintain their own surveys, if the thing is to be done for them at national expense. Those States which have least enterprise or appreciation of the benefits of scientific surveys will assess the cost of making good their deficiencies upon the States which have spent already large sums within their own borders, and have developed their natural resources through the industries thus stimulated.

We notice that the Pennsylvania survey—perhaps the most fruitful and useful of all the State surveys—has been crippled this year by the reduction of appropriations by the Harrisburg legislature to a point scarcely permitting the maintenance of an organized corps. Of course, we can not tell what motives penetrated the Bœotian heads at Harrisburg. They may have cut down the survey because it contained no "jobs" or perquisites—not even the unlimited supply of free public documents to be given away by legislators. Or they may have thought it best to hold on a little, and see whether the work could not be done without further expenditure on their part, by the simple expedient of log-rolling at Washington. We shall certainly not be surprised to see the Pennsylvania members of Congress stipulating, before they vote the appropriation for the national survey, next year, or the year after, that a suitable amount shall be spent in their own State.

These views do not at all affect our judgment of the ability of Director KING. But, great as is his executive ability, we are sorry that the burden he was about to assume has been doubled in weight before reaching his shoulders. The problem of the geological survey of the public lands was difficult enough, and pressing enough, not to be increased by the addition of other labors, even if these had been of undoubted propriety and practicability. The fact that the chairman of the Appropriations Committee of the present House of Representatives is a Tennessee man, is likely to be considered, justly or unjustly, as the cause of the change which has been made, at the outset, in the scope of the work of the new Bureau. This step once taken, we see no way of drawing the line in future : and while we do not deny that a complete national geological survey under one head would be in many respects a good thing, we can not fail to see that it is radically a new departure, and to regret that it should be hastily taken. Further information may change this opinion ; but as we understand the case at present, we can not think otherwise.

Apart from this matter, however, we rejoice to know that Mr. KING intends to attack with promptness and vigor some of the important problems presented by the active mining districts on the public domain. The Comstock lode, and the productive districts of California, Nevada, Arizona, Utah, and Colorado, and perhaps other States and Territories containing public lands, will be, as we hear, surveyed by geologists of practical field-experience during the present year. Of course, the work can not be done in a year for all time. What is immediately needed is such a reconnoissance of each region as will elucidate, on impartial and competent authority, the main features and relations of its geological structure and its mineral deposits. We do not expect miracles ; but we do anticipate great practical benefit from even the preliminary measures adopted by the Director. The work is in good hands. Mr. KING appreciates, we believe, the needs of the government and the country in this respect, and will make the satisfaction of them his foremost object. *

SURGERY EXTRAORDINARY.

The *Medical Record* reports an interesting case of surgery, successfully treated by Dr. J. C. MCKEE, U.S.A., at Prescott, Arizona. The patient was JOEL H. TUDOR, an American, 28 years old, a laborer and amalgamator at the Tip Top silver mine. But this is the only direct connection of the affair with mining or metallurgical occupations ; for the amalgamator in question was injured, not as an amalgamator, but as an amateur juggler. It was his playful custom to mystify spectators by causing the

disappearance of a piece of copper wire about three inches long, which was at one instant visible in his hands, and at the next securely hidden in his nose, while the by-standers engaged in lively bets that it would be found in his sleeve. Then, the bets having been duly arranged, and the shirt and coat-sleeves searched in vain, he would throw back his head, and exhibit the little joker. Unfortunately, he did not know of the back-door to his nose, until on one occasion the wire slid out that way, passed through the pharynx, and entered the stomach. This was in January. For two months, nobody could safely bet on the whereabouts of that wire; but in March, it made itself painfully evident by the formation of a tumor under the surface of the abdomen. The patient, warned by acute pains, had in the mean time traveled in an ambulance some seventy miles to Prescott Barracks. On the 4th of May, Dr. McKEE skillfully cut him open, and, separating the wire with forceps, extracted the two pieces. The details of the operation, though highly interesting to surgeons and creditable to the operator, need not be given here. The patient was under the influence of ether. After it was over, he was put to bed, and subsequently, says the doctor, "on being aroused, he recognized me and asked about the wire. On being told that it had been found and removed, and that it would not trouble him any more, he expressed an opinion about it, more forcible than polite, and again relapsed into sleep." His recovery was rapid, all dressings being removed after 15 days. By this time, Mr. TUDOR has doubtless been completely cured, not only of his subcutaneous lump, and of the wound inflicted in its removal, but also of the practice of hiding wires in his nasal cavity. He will bet on other subjects hereafter. *

NEW PUBLICATIONS.

THE ELECTRIC LIGHT IN ITS PRACTICAL APPLICATION. By PAGET HIGGS, LL.D., D.Sc., *Telford Prizeman and Associate Member of the Institution of Civil Engineers; author of "Electric Lighting," etc., etc.* London and New York: E. & F. N. Spon. 8vo, 240 pages. Illustrated. Price, $3.50.

Mr. HIGGS is favorably known in this field by his English translation of HIPPOLYTE FONTAINE'S *Eclairage à l'Electricité*, and by original papers and books on subjects related to dynamo-electric apparatus and operations. The present volume, while it contains much that has appeared in print elsewhere, is calculated to be a very useful compendium of existing information, and, as such, almost indispensable to the student or experimenter. Moreover, its compilations are not blindly made, but arranged with intelligence and accompanied with critical comments, so that although, as the author says, the object has been to give both *pro* and *contra*, the reader is not left altogether confused by conflicting opinions. Mr. HIGGS acknowledges his indebtedness to DU MONCEL, FONTAINE, TYNDALL, HOUSTON, THOMSON, DEACON, HAYWOOD, and others. The reports of some of these authorities are quoted at length, and others are summarized. The arrangement of the book is good. The introductory chapter briefly explains the voltaic arc and the phenomenon of the incandescence of conductors offering a certain degree of resistance to the passage of the electric current. Electric lights are treated under two heads, according as they are produced by the voltaic arc or by the incandescence of conductors. Under the first head, a chapter is devoted to burners employing the arc, in which the lamps of STAITE and EDWARDS (1846), LE MOLT (1849), ARCHEREAU, LACASSAGNE (1855), WARREN (1878), DUCRETET (1879), GAIFFE, FOUCAULT and DUBOSCQ, SIEMENS, SERRIN, CARRÉ, LONTIN, GIROUARD, WAY, THOMSON and HOUSTON, REYNIER, WERDERMANN, RAPIEFF, BRUSH, WALLACE and FARMER, and KRUPP are described, and one other, designed by the author, and claimed to avoid as much as possible causes of irregularity, and to be at the same time economical of power. The list is tolerably comprehensive; but it does not include all the successful American machines. At least, we have not found any description in this volume of the FULLER system, which is one of the favorites here.

The third chapter is devoted to candles and candle-lamps, the well-known JABLOCHKOFF candle being taken as the principal representative of the class. It will perhaps be generally admitted now that the day of the JABLOCHKOFF and similar devices is about over. All that the famous candle accomplished was to light anew the flame of enthusiasm for electric illumination. In itself, it proved neither convenient nor satisfactory nor cheap; and the practical difficulties and annoyances connected with its use have thus far not been removed. This is only our opinion. However, Mr. HIGGS does not commit himself to positive condemnation of the candle-system.

Lighting by incandescence is the subject of the fourth chapter. A number of burners are described, the most important of which are the SAWYER and MAN, and the EDISON burner. The acknowledged inferiority in economy, that is, the smaller amount of light produced by incandescence as compared with the voltaic arc; the greater heat evolved by the burner; the difficulty of maintaining incandescence without fusion or oxidation, are disadvantages attending all systems of this class. That of SAWYER and MAN appears to be least open to objection; and for lights of moderate power is stoutly claimed to be better than the voltaic arc, however the latter is employed. Mr. HIGGS copies, concerning it, the description furnished by the owners, which is naturally very favorable. His authority for the account of EDISON'S burner appears to be EDISON'S patent specification. This describes a conductor made of an alloy of iridium and platinum. The unpromising appearance of this design, with its "regulator" to prevent the fusion of the conductor, has led some experts of our acquaintance to suspect that EDISON is secretly working in some other direction, and that this specification is put forward as a blind. Without going so far as that, we may at least record our impression that EDISON'S electric light, as here set forth, is not the lamp of the future.

The succeeding chapters are occupied with magneto- and dynamo-electric machines, the mechanical efficiency of electric-light machines, simple mathematical considerations concerning electric lighting, electric regulators, the commercial aspect of electric lighting, the division of the electric light, maritime, military, and miscellaneous applications, and finally electric carbons. These chapters may be said to contain much recent, but no novel, information. The report of the Franklin Institute committee in this country, and that of Prof. TYNDALL in England, are quoted as to the relative efficiency of the various machines; while, as to the important question of cost, the data furnished by the mills at Lowell, lighted on the BRUSH system, are pronounced to be the most favorable yet produced from authentic sources.

According to these figures, 16 lights of 2000 candle-power each, are produced on one circuit with an expenditure of 13·85 horse-power, at a cost of 4d., or about 8 cents per hour per lamp.

In short, Mr. HIGGS leaves the question of the successful introduction of the electric light where he found it, except that he deprecates a too hasty condemnation of the new systems as excessively expensive, in advance of more thorough tests. In one place, he declares that, if the electric light is to compete successfully with gas, patentees and manufacturers must reduce their absurdly high prices and be content with reasonable profits upon their lamps, carbons, and machines. *

TABLES *of the Principal Speeds Occurring in Mechanical Engineering, Expressed in Meters in a Second.* By P. KEERAYEFF, *Chief Mechanic of the Obonchoff Steel Works, St. Petersburg. Translated by* SERGIUS KERN, M.E. New York: E. & F. N. SPON. 1879. Pamphlet, 12mo, 19 pages.

In the introductory note to these convenient tables, Mr. KERN remarks, that they have been received with favor by the engineers of Russia, where they were first published in the Russian language, and adds that the English pocket engineering books give little information on the subject. If this is not altogether true, it is at least true that such information is scattered in ordinary pocket-manuals under many different heads, and is not always to be found when wanted in a hurry. The price of this little pamphlet (sixpence in England) is trifling, and its usefulness under some circumstances might be very great. *

SECOND GEOLOGICAL SURVEY OF PENNSYLVANIA. *Report of Progress. P. Atlas to the Coal Flora of Pennsylvania and of the Carboniferous Formation throughout the United States.* By LEO LESQUEREUX. 8vo, 87 *double-page Plates, with Illustrations.* Harrisburg, 1879.

There is no text in this volume, except the catalogue of names, and the references to various reports in which the species here pictured are more fully described. We can only say that the list is comprehensive, and that the drawings (by Prof. LESQUEREUX and Mr. A. M. REAKLEY) are admirable, and have been printed from the stone in a very satisfactory style. For convenience in reference and completeness and accuracy of delineation, this atlas deserves high praise. *

THE SIERRA NEVADA AND UNION CONSOLIDATED BONANZA.

From an Occasional Correspondent.

The present topic of conversation in San Francisco is the late "Union Bonanza fizzle" on the Union 2300 level or Sierra Nevada 2200-foot level. You have noticed the late decline in Union from $99 to $49½ yesterday on the street. To those believing in the merit of Union, this seems strange, and is simply pronounced to be a bear movement. However, a nigger is on the fence. The talk of Messrs. Patton going to Europe and throwing 2500 shares of Union on the market is very pretty; Bob Morrow, finding it, in partnership with Sharon, advantageous to escape the $3 assessment and the decline sure to come on deferring developments in the Sierra Nevada and Union because they are not yet ready, and naturally will not be, until the North Consolidated, now Union, shaft is down and ready for running out ore, which I think will be near or in October, seems also plausible; likewise their buying Sierra Nevada in again at $46. But still it seems there is something more in the air and in the mines to cause this sudden depression in Union. Deidesheimer says, "It is a mine," and that is enough to console the bulls; but I fear this is a little too dogmatic a view. Deidesheimer can't make it a mine by his mere word or other oracular utterances. The question is, What have they got, and what have they not? Let us look for a moment over the reports of Mr. Patton, the Superintendent of the Union, to whose jurisdiction this memorable Union cross-drift on its 2300-foot level belongs, and see what this gentleman has to say. When the scare came about, the real cross-cut which was run at a right angle, or nearly so "to the main lateral drift, south, on the 2300 level (Union) from the Sierra Nevada incline," its length (main lateral drift) being 200 feet, according to Mr. Patton's letter, published the 7th inst., the papers published on the 11th inst. a telegram of Mr. Patton, saying that the cross-drift on the 2000-foot level of the Sierra Nevada (2300 foot of Union) will have only 35 feet to run to reach a point under the North Consolidated shaft. He also says that careful calculations made on the known lay, and supposed dip of the ledge, where not known, bring the ore-body some few feet west of the 35-foot point in this cross-cut, directly under the North Consolidated shaft. This was given as a sedative to the much-annoyed bulls. Though they were astonished that a real cross-

cut was being driven, still the news had its desired effect. Many nerves were quieted, and Messrs. Patton, Bob Morrow, Sharon, and colleagues were quietly cursed at for interfering with the market. To make the bulls feel better still, a telegram was let loose on the 11th from Virginia head-quarters, saying: "The Union cross-cut, 100 feet south of Sierra Nevada line, is in 25 feet, in a mixture of quartz and porphyry. The rock assays from 90c. to $2.50." Another sedative, but received a little flat. This rock, like so many others, has the convenient name of "cap-rock." In his letter of the 14th, Mr. Patton says: "The cross-cut west will be run 35 feet." From it, apparently, one would think they would stop there and prepare for raising up, to connect with the North Consolidated shaft at some future day. Let us see what they do. Visiting-day came, and what do we find? Instead of stopping under the North Consolidated shaft, we find the cross-cut, which was started 93 feet south of the incline in the "lateral drift south," to have been run in 73 feet west, and still the same cap-rock story; call it, better, broken-up porphyry, or you may call it a little horse. When the cross-cut was 23 feet in, Mr. Patton reports it to be in the same cap-rock formation as Sierra Nevada; and the same was claimed when, at 73 feet, no ore was found. Then also the limit of finding ore west of the North Consolidated intersection (35 feet) was changed, from a few feet to 40 to 60 feet; and at last reports, Mr. Patton is reported to aver that they anyhow will strike ore before the true west wall is reached. It is a sliding game, like a string of India-rubber; if it does not reach, pull more to make it longer. By citing Mr. Patton's varied estimates as to distance, I don't want to throw, for one moment, a doubt on Mr. P.'s statements as regards his honesty of conviction; but I do doubt seriously whether Mr. P. really knows what he is about. In the stopes of the Sierra Nevada, going south to Union line, a slab of vein porphyry sets in about 5 feet wide, with about 8 feet of ore on each side. This porphyry, going south, unmistakably widens and reduces the true ore to 4 feet on the east side, and where the cross-cut runs now is the widened porphyry. Call it a wedge-shaped horse with the base to Union. They may strike, before coming to the west wall, a narrow stringer of ore on the other side of the porphyry wedge, hugging the west wall; but, at any rate, nothing like what the public expected or was led to expect to find, namely, from forty to fifty feet of ore. There are others who claim the ore-channel has not been reached, and among them Mr. Patton, to judge from his reports and telegrams; but, to say the least, it is rather fishy, that the superintendent of a mine should vary his statements so often on the same subject within so short a space of time.

In consequence of not finding ore in this cross-cut, plenty of shorts have been laid, and all the way down from $99; and the parties who laid them inform me that they have not yet filled, and do not propose to fill, because they expect to see the stock go down to $30 within sixty days. Besides those who believe the ore-channel has not been reached, a third party exists who claim that this cross-cut was run on purpose; that the managers knew beforehand that it would not cut any ore; for, as they claim, the ore-body is narrow and twisted, dipping southeast into Union ground, and this cross-cut was run above it into barren vein-rock, on purpose to throw the stock down, to give insiders who had sold all the way from $50 to $99 a chance to gobble up again at low figures; and that, in from two to three months from now, they would show up and make a big market. Two weeks ago I heard this, and was told in advance that a cross-cut was to be run, and it would prove a failure. However, the superintendent's affirmative reports of finding ore there, and the reputation of the managers, ought to exclude any such downright fraudulent imputations. But I give you the rumor to place it on record for what it is worth. Now, then, let us ask, Is Sierra Nevada, or, rather, the late bonanza discovered, likely to prove a dividend proposition to the stockholders? Recollect that between the 2300 and 2400 level the ore-vein dipped steeply down, changing from 38° to 39° to a steep vertical dip; and the question may be asked, Will not that steep dip cut off the bonanza about there? It is one of those things "which no fellow can tell" with certainty; but it is a straw for the man who wants to buy the stock on merit only. If it is the case, it will form a lenticular body skirting the incline from about the 2150 to the 2400 level, say, as far as we know, not more than 30 feet thick and 150 long, as its extreme length. Let us take these figures as extremely favorable ones, even with those anticipating present developments. From the 2150 to 2400 level is 250 feet on the vertical, or 130 feet (round numbers) on the incline, for every 100 feet vertical (incline under 38°), makes the total supposed length of bonanza 325 feet by 20 feet thick by 150 feet long throughout (?), or 1,462,500 cubic feet. Now, say 14 cubic feet to the ton makes 104,480 tons in the bonanza, say in round figures 104,500 tons. Now, according to Mr. Patton's letters, they began crushing May 20th, and ran to the 23d at two thirds capacity, and after that at full capacity of 40 tons per 24 hours. And May 20th to 23d, inclusive, 4 days, at two thirds capacity—say 108 tons. Allow them four days to clean up from the time they shipped bullion, 17th inst., leaves 13 days in June, at 40 tons, and from the 24th to the 31st of May, inclusive, 8 days, at 40 tons per day; total, 21 days.

Four days at two thirds capacity	108 tons.
Twenty-one days, at 40 tons per day	840 tons.
	948—say 950 tons.

But probably they did run 1000 tons, which, taken at a round figure, makes a difference of about $3½ per ton.

Shipped, on 17th inst., $60,388.77, with 1000 tons as a figure value per ton, $60.38. Now, don't forget that no doubt the best rock was milled as a send-off. I am informed by a party who claims to know, that the bonanza won't average more than $35 per ton if not picked. But take the favorable figure, $60.38. Now, the mill keeping $10 per ton, leaves $50.38. Say discount on silver, commissions for handling, transportation, etc., will amount to 15 per cent surely, leaving value of ore per ton $42.83. Now, we had 104,480 tons as the extreme contents of bonanza as far as we can judge or guess; say at $43 per ton, there is $4,492,640 in the bonanza available. Out of this bonanza the North Consolidated or Union shaft has to be paid $1,100,000, leaving $3,392,640, from which must be deducted the expenses of mining, hoisting, pumping, etc. Then this bonanza is figured in its total extent, while it is divided to some extent, as far as we know, between two mines. As such, if all is returned to the stockholders that is due them, without extra large charges, the bonanza may yield $3,000, 000 between two mines. What will that bring the value of the mines down to—two mines with 100,000 shares each? This does not include the time consumed in waiting for extraction, the interest money lost in waiting, and the interest to be paid on the $1,100,000. Each mine—Mexican, Sierra Nevada, and Union—has given two, four and six months' notes, to pay three times each, $123,333, with interest, every two months.

It is not my object to bear the stock or to detract from the value of the Comstock, but to give the thoughtful reader a warning not to overestimate the bonanza which is being uncovered now at the north end, which many may consider a prime time investment. Sad as it may be for the Comstock temporarily, if the bonanza does not pan out to the sanguine hopes of many, still the final results will be more damaging to the Comstock should Eastern capital be roped in mercilessly, regardless of final success.

C.

SAN FRANCISCO, June 24, 1879.

THE MINERAL STATISTICS OF GREAT BRITAIN FOR 1878.

THE INSPECTORS' REPORT.

The opinion so frequently expressed that, when the men are idle, whether from strikes or other causes, the number of deaths in collieries is much larger than in those years when they keep steadily at work, has been again confirmed by the return for 1878 just issued. In 1877, there were 494,386 colliers employed, and they raised 134,179,968 tons of coal, 1,813,541 tons of fire-clay, 12,014,356 tons of ironstone, and 838,395 tons of shale—together, 148,846,260 tons, yet but 1208 lives were lost; while in 1878, there were about 20,000 fewer work-people, and they raised more than 3,000,000 tons less mineral; yet the deaths were 1413, or 17 per cent more than in the preceding year. During 1878, there were 475,329 persons employed, and they raised 132,612,063 tons of coal, 1,625,586 tons of fire-clay, 10,747,227 tons of ironstone, and 813,262 tons of shale—together, 145,798,138 tons. It will be observed that the output of coal has decreased by 1,567,905 tons. During the year now reported on, only 103,183 tons of mineral were raised for each life lost, while in the preceding year 123,217 tons were obtained for each life lost, and in 1876 no less than 159,688 tons. There was 1 death in every 336 persons employed in 1878; while the numbers were 1 in 409, and 1 in 551 in 1877 and 1876 respectively. This is the more remarkable as the number of collieries in operation was only 3968 in 1878, against 4231 and 4385 in 1877 and 1876 respectively. We subjoin our usual tabulated summary, which will permit of the several classes of accidents being compared:

COAL MINES—1877.

NAMES OF DISTRICTS.	SEPARATE ACCIDENTS.					DEATHS RESULTING.				
	Explosions of fire-damp.	Falls of coal, sides and roof.	In shafts.	Miscel., in mine and at surface.	Total.	Explosions of fire-damp.	Falls of coal, sides and roof.	In shafts.	Miscel., in mine and at surface.	Total.
Northumberland, Cumberland, North Durham	1	31	3	29	64	1	32	3	30	66
South Durham & Westmoreland	1	36	12	45	95	1	37	12	45	95
Cleveland, ironstone	1	10	....	10	21	1	10	....	10	21
North and East Lancashire	9	20	7	20	56	42	21	9	20	92
Ireland	....	1	....	....	1	....	1	....	....	1
West Lancashire and North Wales	3	44	14	23	84	40	47	17	23	127
Yorkshire	2	55	15	26	98	3	56	19	26	104
Ditto, coal-field ironstone	....	2	....	....	2	....	3	....	....	3
Ditto, Lincolnshire ironstone	....	....	....	....	....	....	....	....	....	....
Derby, Notts, Leicester, Warwick	1	29	6	15	51	1	30	6	21	58
Ditto, ironstone and fire-clay	....	....	....	....	....	....	....	....	....	....
North Staff., Cheshire, Salop	3	16	9	13	41	3	16	9	13	41
Ditto, ironstone	....	3	....	1	4	....	3	....	1	4
South Staff. and Worcestershire	6	44	8	12	70	11	47	10	12	80
Ditto, ironstone and fire-clay	....	....	....	....	....	....	....	....	....	....
Monmouth, Gloucester, Somerset, and Devon	2	28	4	17	51	2	29	4	18	53
Ditto, ironstone	....	2	....	....	2	....	2	....	....	2
South Wales	6	53	16	26	101	23	53	16	30	122
Ditto, ironstone	....	....	....	....	....	....	....	....	....	....
East Scotland	6	25	14	14	59	212	27	15	17	271
Ditto, ironstone and shale	....	7	1	3	11	....	8	1	3	12
West Scotland	2	25	4	9	40	2	26	4	10	42
Ditto, ironstone and shale	2	....	4	7	13	3	....	4	7	14
Total coal mines	42	408	112	249	811	341	422	124	265	1,152
Total iron, fire-clay, and shale	3	24	5	21	53	4	26	5	21	56
Gross total	45	432	117	270	864	345	448	129	286	1,208

COAL MINES—1878.

Northumberland, Cumberland, North Durham	1	31	3	14	49	1	32	4	14	51
South Durham and Westmoreland	3	36	7	32	78	4	37	7	35	83
Cleveland, ironstone	....	7	....	10	17	....	7	....	10	17
North and East Lancashire	3	32	4	15	54	45	33	4	17	99
Ireland	....	2	....	....	2	....	2	....	....	2
West Lancashire and North Wales	5	52	8	37	102	204	54	9	37	304
Yorkshire	4	38	4	30	76	4	39	5	32	80
Ditto, coal-field ironstone	....	1	....	....	1	....	1	....	....	1
Ditto, Lincolnshire ironstone	....	....	....	....	....	....	....	....	....	....
Derby, Notts, Leicester, Warwick	....	29	7	18	49	....	31	11	13	55
Ditto, ironstone	....	....	....	....	....	....	....	....	....	....
North Staff., Cheshire, Salop	3	21	9	3	36	28	21	10	3	62
Ditto, ironstone	....	10	2	....	12	....	10	3	....	13
South Staff. and Worcestershire	1	30	7	6	44	1	31	7	8	47
Ditto, ironstone	....	1	2	....	3	....	1	2	....	3
Monmouth, Gloucester, Somerset, and Devon	1	44	4	16	65	268	45	4	16	303
Ditto, ironstone	....	....	....	....	....	....	....	....	....	....
South Wales	5	60	18	28	111	7	62	21	33	123
Ditto, ironstone	....	....	....	....	....	....	....	....	....	....
East Scotland	1	32	12	13	58	2	33	17	13	65
Ditto, ironstone and shale	....	3	1	1	5	....	3	1	2	6
West Scotland	4	25	5	10	44	22	25	5	12	64
Ditto, ironstone and shale	....	2	1	2	5	....	2	1	2	5
Total coal and fire-clay mines	31	439	88	217	775	586	452	104	233	1,375
Total ironstone and shale mines	....	17	6	13	36	....	17	7	14	38
Gross total	31	456	94	230	811	586	469	111	247	1,413

The number of persons employed during 1878 in and about the mines

classed as metalliferous was 51,458, against 57,395 in the preceding year. Of these 34,624 were employed underground, and 20,834 at surface. Of the latter, 96 (74 in Cornwall and Devon) were females under 13 years of age; 981 (799 in Cornwall and Devon) were females between 13 and 18; and 1741 (1454 in Cornwall and Devon) were females above 18; total females, 2818, or about 5½ per cent. No females were employed underground. From the subjoined summary it will be seen that in the aggregate the following quantities of mineral were produced during the two years reported upon:

Mining Produce.	1877. Tons.	cwts.	1878. Tons.	cwts.
Arsenic (obtained at the mines)	4,110	17	4,464	14
Arsenical pyrites	5,341	5	3,638	2
Barytes	19,161	16	21,715	12
Bauxite	2,763	0	3,426	0
Bluestone	.....	..	538	0
Brick-earth	2,411	0	.....	..
Building stone	331,101	0	264,662	10
Calc spar	2,353	2	3,181	14
Cement stone	2,304	0	2,720	10
Chert	3,290	9	3,997	0
Cobalt ore	.....	..	98	18
Copper ore	65,217	6	54,568	12
Copper precipitate	628	2	532	3
Dross spar	142	7	327	16
Fire-clay	756	12	.....	..
Flagstone	2,080	0	10,485	0
Fluor-spar	77	18	251	19
Ganister	439	0	1,071	0
Gold	11 lbs. 11 oz. 5d. 18 gr.		702 oz. 16d. 8 gr.	
Gold ore	1 cwt. 3 qr. 5 lb.		2 qrs 26½ lbs.	
Gold sulphurets	2 tons 19 c. 0 qr. 8 lbs.		.....	..
Gypsum	73,908	0	74,908	0
Iron ore	2,815,848	14	2,559,333	19
Iron pyrites	17,794	18	14,759	18
Jet	unknown.		unknown.	
Lead ore (dressed)	76,471	1	74,771	2
Lead ore (undressed)	3,938	0	1,610	0
Limestone	528,010	0	478,778	0
Manganese ore	3,038	14	1,734	4
Ocher and umber	2,867	7	2,903	5
Phosphate of lime	6	0	16	0
Pipe-clay and potter's clay	41,819	0	60,261	0
Purbeck stone for paving, kerbs, etc	13,228	0	14,411	10
Rock-salt (exclusive of the white salt made from brine)	207,942	0	182,930	0
Silver	.....	..	153 ozs.	
Silver ore	142	10	86	5
Silver precipitate	.....	..	8 cwt. 2 qrs. 17 lbs.	
Slate and slabs dressed	172,130	10	169,041	1
Slate undressed	80	0	.....	..
Steatite	68	0	57	0
Tamping stone	100	0	60	0
Tin ore dressed (black tin)	12,665	0	13,632	10
Tin ore partially dressed (white), estimated to contain 97¼ tons of black tin	1,022	13	950	9
Tin ore undressed (tin-stuff), estimated to contain 490¼ tons of black tin	11,511	0	9,847	17
Uranium ore	0	2	0	8
Whinstone	18,308	1	17,871	0
Wolfram	15	0	10	0
Zinc ore	24,227	19	24,682	12

The fatal accidents at the mines, classed under the Metalliferous Mines Regulation Act, in Great Britain and Ireland, amounted to 74, against 87 in the preceding year, the calamities thus being 15 per cent less numerous than last year. From these accidents the number of deaths resulting was 77, being 20 less than in the preceding year. It appears that in 1878, in the mines classed under the Metalliferous Mines Regulation Act, there was one fatal accident among every 811 persons employed in and about the mines, and one death by accident among every 1413 persons employed; and in 1877, one fatal accident among every 659 persons, and one death by accident among every 592 persons employed in and about the mines. The subjoined summary will facilitate the comparisons:

METALLIFEROUS MINES—1877.

Names of Districts.	Separate Accidents. Falls of ground.	In shafts.	Miscellaneous underground.	At surface.	Total.	Deaths Resulting. Falls of ground.	In shafts.	Miscellaneous underground.	At surface.	Total.
Northumberland, Cumberland	10	3	4	2	19	10	4	5	2	21
Durh., Westm., and No. Yorks	1	....	2	1	4	1	....	2	1	4
East and West Yorkshire	1	2	1	....	4	1	2	1	....	4
Derbyshire and Nottingham	....	1	....	....	1	....	1	....	....	1
North Wales, Isle of Man, etc	6	2	8	5	21	7	2	9	5	23
South Staffordshire and Worcester	1	....	....	....	1	1	....	....	....	1
Glouc., Monm., Somerset, etc	4	2	1	....	7	5	2	1	....	8
Glam., Pembroke, etc	....	....	....	1	1	....	....	....	1	1
Cornwall, Devon, etc	10	8	6	2	26	13	9	6	2	30
East Scotland	2	....	....	....	2	2	1	....	....	3
Ireland	1	....	....	....	1	1	....	....	....	1
Total	36	18	22	11	87	41	21	24	11	97

METALLIFEROUS MINES—1878.

Northumberland, Cumberland	7	10	4	1	22	7	10	4	1	22
Durh., Westm., and No. Yorks	4	....	1	....	5	4	....	1	....	5
East and W. Riding, Yorkshire	1	1	....	....	2	1	1	....	....	2
Cheshire, Lancashire, and Sussex	....	....	1	....	1	....	....	1	....	1
Lancashire West	1	....	....	....	1	1	....	....	....	1
North Wales, Isle of Man, etc	1	1	8	2	12	1	1	9	2	13
South Staffordshire and Worcester	....	....	1	....	1	....	....	1	....	1
Glouc., Monm., Somerset, etc	1	1	1	....	3	1	2	1	....	4
Glamorg., Pemb., and Carmarthen	1	....	....	....	1	1	....	....	....	1
Cornwall, Devon, etc	7	4	5	5	21	7	4	6	5	22
East Scotland	2	1	....	....	3	2	1	....	....	3
Ireland	2	....	....	....	2	2	....	....	....	2
Total	27	18	21	8	74	27	19	23	8	77

The subjoined tables show, among other things, that there has been a diminution in the output of coal to the extent of 1,567,905 tons, representing about 1¼ per cent upon the entire annual production. The number of collieries in operation has fallen off from 4231 to 3968, or to the extent of nearly 6¼ per cent. These tables also show the relative safety of the several districts, and it will again be seen that in those most celebrated for good management and strict discipline the casualties have been fewest:

1877.

Names of Districts.	As computed by each inspector for his own district. Males employed.	Tons mineral raised.	Per separate fatal accident.	No. employed per life lost.	Tons of mineral raised per separate fatal accident.	Tons of mineral raised per life lost.	No. of mines.
Northumberland, Cumberland & N. Durham	48,019	13,316,156	750	727	213,301	209,837	212
Ditto, ironstone*	.....	3,940	.....	.....	.....	.....	.....
So. Durham, Westmoreland & N. Riding of Yorkshire	56,445	19,548,343	595	595	208,944	208,944	210
Yorkshire—Cleveland ironstone	8,569	8,075 / 6,289,745	408	408	299,896	299,896	46
North & East Lancashire	29,344	8,741,387	524	319	158,056	96,208	344
Ditto, ironstone	.....	135	.....	.....	.....	.....	.....
Ireland	1,248	140,181	1,248	1,248	142,221	142,221	38
W. Lancashire & N. Wales	40,342	11,426,745	480	318	137,165	90,723	301
Ditto, ironstone	.....	23,811	.....	.....	.....	.....	.....
Yorkshire	60,594	15,805,235	606	566	162,478	151,849	533
Ditto, ironstone	.....	249,454	.....	.....	.....	.....	.....
Ditto, Lincolnshire ironstone	183	122,991	.....	.....	.....	.....	10
Derby, Notts, Leicester, and Warwick	50,285	12,903,866	986	867	256,305	225,372	412
Ditto, ironstone	.....	103,551	.....	.....	.....	.....	.....
North Staff., Cheshire, and Shropshire	26,126	5,742,020	580	580	157,206	157,206	248
Ditto, ironstone	.....	2,183,030	.....	.....	.....	.....	.....
So. Stafford & Worcester	28,760	9,500,000	411	359	141,195	123,545	476
Ditto, ironstone	.....	206,452	.....	.....	.....	.....	.....
Monmouth, Somerset, part Glam., and Brecon	31,906	7,056,136	602	580	136,792	131,818	394
Ditto, ironstone	.....	95,442	.....	.....	.....	.....	.....
South Wales	44,812	11,671,730	443	367	117,714	97,452	312
Ditto, ironstone	.....	119,422	.....	.....	.....	.....	.....
East Scotland	39,769	11,452,373	568	140	186,882	46,225	351
Ditto, ironstone	.....	893,222	.....	.....	.....	.....	.....
West Scotland	27,984	6,867,701	528	500	168,131	159,124	344
Ditto, ironstone	.....	1,723,161	.....	.....	.....	.....	.....
Totals and averages	494,386	146,194,344	572	409	172,276	123,217	4,231

* The total quantity of ironstone from the different districts was 12,014,356 tons; which, added to 134,179,968 tons of coal, gives the total of 146,194,344 tons.

1878.

Northumberland, Cumberland, and N. Durham	45,394	12,913,851	926	890	268,810	258,268	207
So. Durham and Westmoreland, and N. Riding of Yorkshire	52,906	18,614,076	680	638	241,553	227,002	219
Yorkshire—Cleveland ironstone	6,791	6,836 / 5,316,477	399	399	313,392	313,392	44
North and East Lancashire	29,789	8,633,839	552	301	161,415	88,044	314
Ditto, ironstone*	.....	41	.....	.....	.....	.....	.....
Ireland	1,222	122,051	611	611	62,930	62,930	31
West Lancashire and North Wales	39,024	11,651,797	382	128	115,388	38,716	263
Ditto, ironstone	.....	19,574	.....	.....	.....	.....	.....
Yorkshire	59,777	15,582,283	776	738	207,729	197,471	515
Ditto, ironstone	.....	226,793	.....	.....	.....	.....	.....
Lincolnshire ironstone	174	193,014	.....	.....	.....	.....	10
Derby, Leicester, Notts, and Warwickshire	49,354	13,440,184	1,007	897	277,047	246,824	390
Ditto, ironstone	.....	74,926	.....	.....	.....	.....	.....
North Staff., Cheshire, and Shropshire	24,601	5,584,400	512	328	163,434	104,598	248
Ditto, ironstone	.....	2,091,750	.....	.....	.....	.....	.....
So. Stafford and Worcester	25,103	8,976,000	534	502	198,828	186,898	414
Ditto, ironstone	.....	191,513	.....	.....	.....	.....	.....
Monmouth, Somerset, part Glam., and Brecon	30,874	7,152,258	475	93	112,786	22,015	360
Ditto, ironstone	.....	100,595	.....	.....	.....	.....	.....
South Wales	43,934	12,097,206	396	357	110,426	99,653	288
Ditto, ironstone	.....	96,189	.....	.....	.....	.....	.....
East Scotland	40,098	11,667,559	636	564	207,951	184,520	348
Ditto, ironstone	.....	713,277	.....	.....	.....	.....	.....
West Scotland	26,288	6,169,723	536	381	167,411	118,886	317
Ditto, ironstone	.....	1,723,078	.....	.....	.....	.....	.....
Totals and averages	575,329	143,359,290	586	336	179,777	103,183	3,968

* The total quantity of ironstone from the different districts was 10,747,227 tons; which, added to 132,612,063 tons of coal, gives the total of 143,359,290 tons.

The above tables really embrace all the general statistics contained in the reports; and a large amount of information as to the precise circumstances under which the several accidents happened is given in the reports for each district. As usual, the reports supply many valuable suggestions and observations of a practical character, which will be fully referred to in subsequent journals.—*The (London) Mining Journal, June 7.*

INCORPORATION OF THE STEAM-HEATING PROJECT.—The certificate of incorporation of the steam-heating company, with which General Spinola has been connected, was filed on the 2d inst. It is called the "New York Steam Power and Heating Company." Its objects are stated to be the "making of steam to be conveyed in pipes through the streets, squares, and lanes of New York, for the purpose of heating all buildings, public and private, for cooking and for the heating of water in houses, and for a motive power in all cases where steam can be properly used; also for cleaning the streets of snow and ice, and to be used in any and every manner where steam can be employed for a useful purpose." The capital stock is $5,000,000, to be divided into 50,000 shares. The corporators are Edwards Pierrepont, Henry G. Stebbins, Edwin D. Morgan, Marshall O. Roberts, Nelson M. Beckwith, Hugh J. Jewett, Robert Lenox Kennedy, and Henry F. Vail,

SULPHURIC ACID AND ALKALI.

Although, perhaps, less is heard by the general public of the manufacture of sulphuric acid and alkali than of many other industries, there is scarcely a trade which could be carried on were the supply of those materials stopped. Among all branches of chemical industry, says Prof. George Lunge,* of technical operations connected with alkali-making, this is preëminent, not merely from the magnitude of the works, the absolute bulk of the raw materials used and the quantity produced, but also from the fact that most other chemical products require one or more branches of alkali-making as the conditions of their own existence. The professor uses the expression "alkali-making" in its widest sense, embracing the manufacture of sulphuric acid, sulphate of soda, muriatic acid, soda-ash, etc., and bleaching-powder, and including, also, those works which stop, for instance, at sulphate of soda, or even at sulphuric acid itself; since most factories making these as intermediate products are also sellers of them, and no strict separation can be made in this respect. In this wider meaning, the products of alkali-making are necessary materials for many metallurgical processes, for the manufacture of artificial manures, soap, fatty and mineral oils, glass, paper, many inorganic and organic coloring-matters (especially nearly all coal-tar dyes), and even of many articles of food. It is thus evident how great is the importance of the alkali trade in its wider meaning to the civilization of mankind, though it is certainly going too far to measure, as some have done, the civilization of a country by the development of this special industry.

The different branches of alkali-making are organically connected in such a manner that only under special local conditions can one or more of the principal subjects be omitted. The initial process is, Prof. Lunge explains, nearly always the manufacture of sulphuric acid, by burning brimstone or pyrites with the aid of nitrate of soda and of fuel, and in many cases leaving a residue from which copper, iron oxide, and even silver are obtained. The sulphuric acid then enters largest into manufactures not belonging to this cycle, of which only that of superphosphate is, as a rule, conducted on a sufficiently large scale to admit of the establishment of works for it exclusively. With this one very large and a few small exceptions, the manufacture of sulphuric acid is at once followed in the works by a second step—the manufacture of sulphate of soda by decomposing common salt with sulphuric acid, muriatic acid appearing as a by-product. Both articles are again required in several other chemical industries, and are accordingly sold as they are; but for the most part they only serve as intermediaries, the sulphate being further worked up to soda-ash, and the muriatic acid to bleaching-powder, more rarely to chlorate of potash at the same works. Some works sell their sulphate of soda as such, either for the manufacture of glass, etc., or to alkali works. Especially is this the case in countries where fuel is too dear for making alkali with a profit. The calcined sulphate of soda or salt-cake is a solid body, easily carried, not merely in ordinary casks, but loose in whole truck or ship loads. On the other hand, the muriatic acid, which appears as an unavoidable by-product, is in the same predicament as vitriol—that is to say, the expense of package and carriage forbids its sale in large quantities and conveyance to great distances. Very frequently (though certainly much more rarely now than formerly) the muriatic acid, liquefied solely for the sake of not laying waste the vegetation of the country around, was run into the nearest water-course, whose water was any thing but improved by it. It was, therefore, a matter of importance to utilize the muriatic acid in a form in which the difficulties of transit were overcome, and, fortunately, such a form had been found even before the development of the alkali manufacture in bleaching-powder. Probably all works not going beyond salt-cake are compelled to utilize their muriatic acid in some way; and they do it mostly by the production of bleaching-powder, more rarely by that of chlorate of potash or bicarbonate, or by using up the acid itself.

The position and experience of the author give him unusual facilities for treating the subject, and it can not be doubted that he has utilized those facilities to the utmost. In the first place, he describes the processes and products scientifically; this is followed by technical and theoretical descriptions of all the processes occurring in this series of manufactures; and his third and principal object has been to give to practical manufacturers both complete and reliable information upon all the apparatus and processes which have come under his notice, so as to enable them to know what has been done in this field beyond the range of their own personal observation. His own practice of eleven years in the North of England has been supplemented by numerous visits to the other alkali-manufacturing districts of Britain, and to those of Belgium, France, Germany, and Austria. Mr. Lunge's present position as professor at a technical high-school enables him to state frankly what he knows and what he has seen, since he can expect no benefit whatever from keeping any thing back. In his visits he has, of course, been favored with some confidential communications which he is not at liberty to reproduce here as he received them; but in every case he has obtained permission to make use of the substance of such communications for this treatise, and in the vast majority of cases no restraint whatever has been placed upon him. He has thus been enabled to embody a large number of facts partly published abroad, partly never previously published, and all of them comparatively or entirely unknown in this country; but this has not been done to the exclusion of the British styles of working and of the inventions made here, which, on the contrary, form the groundwork of the whole treatise, since the author's personal working experience was gained in England. The greatest prominence has been given to the processes now in general use, and he has grouped others around them, appending critical remarks as to their practicability whenever that was possible.

The present volume gives all that is useful to be known with regard to sulphuric acid, the chemical and physical properties of oxides of sulphur being first considered, and this is followed by a chapter on the analysis of sulphuric acid. The history and general principles of acid-making are then given, and then comes a chapter on the raw materials of the sulphuric-acid manufacture, in which brimstone, pyrites, other sources of sulphur, nitrate of soda, and nitric acid are treated of in different sections. The production of sulphuric acid from brimstone occupies the fifth chapter, and there is then a chapter on the production of sulphuric acid from pyrites. In this chapter Prof. Lunge refers to the new crushing-mill invented by Motte, of Dampreny, near Charleroi, which has been improved by the Markisch Engine-Works. The principle is that of a peculiar kind of mortar, with hollow bottom, in which the crushing is done by a pestle. He remarks that whether this mill is really preferable to the stone-breaking machines (Blake's), experience will show. For crushing purposes generally, most will be inclined to give the preference to the original; but the new mill has at least one advantage for certain purposes, which Prof. Lunge does not notice. There is a regular and continuous crushing action in the mortar proper; but from the way in which the bottom of the pestle fits the inverted conical opening in the bottom, none of the material can pass from the mortar without undergoing a grinding action, which must result in fine and uniform powder. The advantage of this would in many cases compensate for the diminished economy. In subsequent chapters the burner-gas, the lead-chambers, working the chambers, recovery of the nitrogen compounds, the theory of the formation of the sulphuric acid in the lead-chambers, the purification of sulphuric acid, its concentration, the arrangement of the apparatus of sulphuric-acid works, the yield and cost of sulphuric-acid manufacture, the by-products of the manufacture of sulphuric acid, the manufacture of fuming oil of vitriol and of sulphuric anhydride, and other processes for manufacturing sulphuric acid, are treated of, the concluding chapter giving the applications of sulphuric acid and statistics.

The volume will be of great value to the student of practical chemistry, as it will give him an amount of information not obtainable from any other source, and which, being given by a scientific writer who has had long working experience of the processes he describes, is the best substitute for actual practice which the student can hope for. It will also prove useful to the manufacturer himself, while to the general reader it will not be uninteresting.—*The (London) Mining Journal, June 7.*

* A Theoretical and Practical Treatise on the Manufacture of Sulphuric Acid and Alkali, with the Collateral Branches. By George Lunge, Ph.D., F.C.S., Professor of Technical Chemistry at the Federal Polytechnic School, Zurich (formerly Manager of the Tyne Alkali Works, South Shields). Vol. I. London: John Van Voorst, Paternoster-row.

SINKING AND TUBBING AT WHITBURN COLLIERY.

We are now able to announce that the sinking and tubbing-back of the water at the Marsden No. 1 Pit, near South Shields, the property of the Whitburn Coal Company, has been successfully completed by the "Kind and Chaudron" process. The works were formally examined last week by Mr. John Daglish, the managing director and engineer for the Whitburn Coal Company, and M. Chastelaine, the engineer to the Kind and Chaudron Company, for the purpose of giving the certificate on which the payment to this latter company for the use of their patent right, plans, superintendence, etc., depended. The conditions of the agreement with the Kind and Chaudron Company were, that the tubbing had not to be more than 6 in. out of the perpendicular, nor to allow to pass more than four gallons of water per minute. On examination, it was found that the tubbing is not one eighth of an inch out of the perpendicular, and that the quantity of water which passes does not amount to a quarter of a gallon per minute. This result is most satisfactory to the Whitburn Coal Company, and the operations for sinking the No. 2 Pit through the water-bearing strata have now been commenced by the "Kind and Chaudron" process, while sinking in the ordinary manner will be continued in the No. 1 Pit. The proprietors of this extensive undertaking are, in great measure, also the proprietors of the well-known Harton, Hilda, and Boldon Collieries, near South Shields, and the entire acreage under lease to these companies embraces an area six miles in length by eight miles in width, exceeding 25,000 acres, and extending over the whole area from South Shields nearly to Sunderland. The chairman of the Whitburn Coal Company is Mr. Hilton Philipson, also the largest owner in the Harton Collieries. Mr. Lindsay Wood, the present chairman of the Durham Coal Trade, and managing owner of the Hetton and North Hetton Collieries and of the Harton Collieries, is also one of the largest shareholders in the Whitburn undertaking. The remaining director is Mr. Charles Anderson, of Cleadon Lodge, who is also a director of the Bedlington and of the Heworth Collieries. The works are under the direction of Mr. John Daglish, mining engineer, Tynemouth.—*Colliery Guardian, June 13.*

IMMIGRATION INCREASING.—The following table will show the number of arrivals at the port of New York during the first six months of the present year as compared with the corresponding period of 1878:

	1878.	1879.	Increase.
January	1,600	2,190	590
February	2,331	2,617	286
March	4,558	6,051	1,493
April	8,197	11,406	3,209
May	11,450	18,328	6,878
June	9,783	11,692	1,909
Total	37,919	52,284	14,365

CONDITION OF COLLIERIES.—The reports of the Inspectors of Schuylkill County, Pa., relative to the condition of the collieries in their district, with returns of accidents and their causes, furnished in accordance with a late order of the judges of the several courts of that county, illustrate the neglect with which the provisions of the Pennsylvania Ventilation Act, with those of other acts for ventilating mines, are treated in some quarters. The reports are for May. In the Pottsville District, out of 15 collieries examined, the condition of 2 was found very good, of 6 good, of 2 medium, and of 5 poor. Of the same number inspected in the Schuylkill District the condition of 2 is pronounced very good, of 7 good, of 4 medium to fair, of 2 poor. The condition of 14 collieries in the Shamokin District is represented by 3 good, 9 medium to fair, and 2 poor. Inadequate ventilation was the fault of 16 mines of the number thus inspected. The Shenandoah District inspector complains that the locomotives used generate and emit a large amount of gases that vitiate the air in the workings to an injurious extent, and states that unless some improvement is made either to prevent such generation or its effects, he will be compelled to enforce their discontinuance. In one case, a fall of coal had occurred by insufficient propping; in another, a hoisting-rope was "poor," rendering the shaft a death-trap. Accidents are enumerated and coroners' censures, where these arose from criminal negligence, recorded. The keeping up of like monthly returns is well calculated to sharpen inspectors in their duties, and to wake up neglectful managers,

PROGRESS IN SCIENCE AND THE ARTS.

Metallurgy and Mineralogy.

Malleable Nickel and Cobalt.—In the recent issue of the *Berichte* of the German Chemical Society of Berlin, is a very instructive and valuable paper by Herr Th. Fleitmann upon an interesting investigation undertaken by him for the purpose of determining the cause of the want of malleability shown by the metals above named. He proceeded upon the hypothesis that this want of malleability might be ascribed to their absorption of carbonic oxide during the process of their preparation; and knowing the readiness with which metallic magnesium, under certain conditions, will destroy the oxides of carbon, he fused the metals nickel and cobalt with a small quantity of magnesium. The success of the experiment was quite surprising, and fully demonstrated the correctness of the hypothesis, since, by the addition of $\frac{1}{6}$ per cent of magnesium, Fleitmann succeeded in obtaining both nickel and cobalt in a malleable condition. The addition of this small percentage of magnesium appeared to change the structure of these metals entirely, and to render them readily weldable when hot. Nickel is even malleable in the cold; while cobalt in the cold becomes extremely hard; and the suggestion is made that the latter metal may be applicable for cutting instruments. The cast metals thus prepared are very compact, and almost as solid and tough as steel. Both take a high polish, and resist the action of the atmosphere very well. Fleitmann has also succeeded in welding malleable nickel and cobalt together with pieces of iron and steel, so that the pieces of iron and steel that are coated on one or both sides with nickel or cobalt may be beaten out to the thinnest plates without any separation of the metals. He also notes some valuable facts in relation to the action of $\frac{1}{8}$ per cent of magnesium on cold steel. For a fuller abstract of Fleitmann's paper, see the *American Chemical Journal* for June, and for the article in full consult *Berichte der Deutschen Chem. Gesellsch.*, xii. 454.

Geography.

Geographical Discoveries in the State of New York.—At a late meeting of the New York Academy of Sciences, Prof. Arnold Guyot, of Princeton College, presented before the Geological Section a paper upon "The Topography of the Catskills," containing the results of several years of study of these mountains, and which he is about to publish. From the contents of this interesting paper, it will appear, that this region of country—in the midst of the oldest settlements, and long celebrated as a summer resort—has remained comparatively an unknown wilderness, even to this day; for Prof. Guyot, within the past few summers, has actually discovered and named an extensive group of mountains rising into peaks in some cases over 4000 feet high (the "Southern Catskills," or "Shandakeens"), which are not laid down on any map, or described in any gazetteer. These works of reference refer to this region as "a hilly country," merely, and the fact that it contains mountains higher than the true Catskills, is quite new to science, and it has been reserved to Prof. Guyot to make an interesting geographical discovery in the very heart of the State of New York. For the paper *in extenso* our readers are referred to the Proceedings of the Academy, and for a fuller abstract, to the *American Naturalist* for July, to which we are indebted for the brief notice here given.

Chemistry, Physics, and Technology.

Magic Mirrors.—Mr. Robert Mallet, in an article contributed to a London exchange, explains at length some curious phenomena of reflection, which he holds may serve to explain the puzzling peculiarity of the so-called "magic" mirrors of the Japanese, which, as many of our readers are aware, have the property of reflecting upon a screen or wall letters, figures, and the like, from an apparently perfectly smooth polished surface of metal, on which not the slightest trace of the reflected images is visible. Prof. Mallet's paper records an experiment which may be regarded as demonstrating that the phenomena can be reproduced by stamping, on the reverse side of the metal plate, the device to be reflected, thus rendering the portions of the reflecting surface directly in the line of the blow more dense than the adjacent parts. This difference in density, as Mallet shows, suffices, by modifying the reflective power of the metal plate, to reproduce the phenomena of the "magic mirror" without resorting to the explanation of skillful and imperceptible curvations of the reflecting surface.

In one experiment that Mr. Mallet performed, a silver half-crown was struck at the Royal Mint, showing the Queen's head on the obverse side, but without any design on the reverse face, where a flat surface of polished steel was placed in the coining-press in place of the usual reverse die. "When this flat and polished surface was exposed obliquely to bright sunlight, the reflected image thrown upon a screen not only presented with much distinctness and accuracy the outline of the head, but also a portion of the Victoria surrounding it, the head and inscription being made visible by a far more brilliant light than the rest."

A Novelty in Lamps.—The Committee of Science and the Arts of the Franklin Institute lately passed a very favorable judgment upon a mechanical lamp of peculiar construction, known as the Hitchcock lamp, and designed to burn heavy fat or greasy oils without a chimney. Mechanical lamps are not altogether new. The well-known Carcel lamp, the oldest, and perhaps the best known of its class, which is also designed to burn fat oils, is provided with a mechanical movement which pumps the oil up to the wick from the lamp body, while the air-supply is obtained by the use of a chimney of glass. An American lamp (the immediate predecessor of the Hitchcock), known as the Jones and Hitchcock lamp, is designed to burn kerosene without a chimney, and effects its object by means of a mechanical movement, which (unlike the Carcel) furnishes the air-supply to the flame, the oil being supplied to the wick by capillary action. The Hitchcock lamp presents the novelty that the mechanical movement performs both these functions—supplying the air and feeding the oil simultaneously. The committee's report makes special reference to the mechanical excellence displayed in its construction, and places its illuminating power, when consuming 922·4 grains of lard-oil per hour, at 16·9, or nearly 17 candles. The form of lamp examined by the committee was designed especially for railway cars.

Chemical Notes.—For the purification of mercury, L. Meyer recommends that the impure metal be allowed to fall through a solution of ferric chloride. (*Berl. Ber.*).——Donath criticises the proposal of Crookes that metallic barium can be obtained from barium amalgam, by treating sodium amalgam with an aqueous solution of barium chloride, and distilling off the mercury. He finds, on repeating the procedure, that the product left behind is by no means pure barium, but an amalgam containing a considerable quantity of barium. It was found to be impossible to purify this product further even by heating it to redness in a porcelain tube. The only reliable mode of obtaining it still appears to be that practiced by Bunsen and Mattheissen, by the electrolysis of the fused chloride. (*Berl. Ber.*).——To keep the metallic connections of galvanic batteries free from rust, Beilstein and Jawein recommend the use of what they call *oleonaphtha*—a product obtained from Caucasian pretroleum. (*Berl. Ber.*). The editor of the *Am. Chem. Jour.* suggests that the lubricating oil obtained from American petroleum would doubtless answer the same purpose equally well.

The Value of Aluminium as a substitute for iron wire in telegraphy is attracting some notice in Germany. This metal has a conducting power about double that of iron, and can be drawn into extremely thin wire without difficulty. Its high price has thus far operated as a serious obstacle in the way of its general introduction for this and many other purposes for which its properties excellently adapt it. It is now suggested by the *D. Allgem. Polytech. Zeitung* that an alloy of aluminium and iron can be made thinner and of better conducting qualities than iron wire, and especially well suited for telegraphic uses. For military purposes, such wire, it is pointed out, would, on account of its light weight, be most desirable and useful.

Engineering.

The Lesseps Panama Interoceanic Canal.—In conversation with our friend, Mr. John C. Trautwine, a few days since, we learned that, in his opinion, the route for this canal, parallel with and in close proximity to the Panama Railroad, and which, at the instigation of M. De Lesseps, has been adopted by the late Paris Convention, without any but tide-locks, is, perhaps, the least eligible of all the proposed Darien routes. The Nicaragua route is not properly a Darien one; but even if it were, Mr. Trautwine thinks that its numerous locks should exclude it from consideration, as the work is one in which all civilized nations will be deeply interested, and to the accomplishment of which all will be called upon to contribute. This consideration, he insists, should lead to the adoption of the shortest route, and to liberal dimensions of canal and tunnel sections. Hence, he advocates the San Blas route, which is but about thirty-three miles in length, and which, he thinks, can be built more cheaply than the Panama one, which is about half as long again.

Few persons, perhaps, have had more favorable opportunities than himself to form a correct judgment of the subject, inasmuch as he spent a year on the Isthmus in the capacity of Chief-Engineer of the Panama Railroad, and soon after explored the entire length of the Atrato, about 200 miles, in search of an interoceanic canal route, besides coasting the Isthmus closely on both the Atlantic and Pacific sides. His report (see Vols. 27 and 28, *Journal of the Franklin Institute*, 1854) dispelled the doubts that had previously embarrassed the subject, at least so far as to prove that Humboldt's famous Raspadura canal and his level plain at the head of the Napipi were both myths, and that a formidable elevation extended throughout the entire Isthmus, presenting a serious obstacle to a route across any part of it. The several explorations that have been made since his, on the faith of alleged low passes, have all encountered this range of hills, and have resulted as he predicted they would before they were began.

In the *Polytechnic Review*, August 19th, 1876, referring to the Lesseps Panama route, he says as follows: "Again a route has been suggested to run nearly side by side with the Panama Railroad. This would have very important advantages over any other in the facilities for the transportation of men, materials, and supplies; but my experience as chief-engineer of that railroad in 1850 enabled me to see that that route, with tide-locks only, would for ten or twelve miles involve a tunnel and deep cuttings fully as expensive as those on the San Blas line, while for the remainder (about forty miles) of its length, the cost would be considerably greater than on the San Blas."

Mr. Trautwine thinks that, taking into consideration the loss of interest on money and the cost of damages from floods, it is very doubtful whether *five hundred millions of dollars and twenty-five years* of time would suffice to construct the Panama Canal; or whether it would ever pay if built, as he feels confident it never will be. He says that the Suez Canal is no more to be compared with that of Panama in point of engineering difficulties than a ditch-drain through a land meadow, to the Caledonia Ship-Canal of Scotland; and that, if the advocates of the Panama route had had any conception of the appalling obstacles in their way, they would at least have reserved their decision until a detailed survey of the line had been made. As it is, he considers the Paris Convention premature, and its decision hasty, ill-advised, and, in all probability, most unfortunate. Instead of ignoring the liability to earthquake disturbances, he regards it as a serious consideration, common, however, to all the routes. He thinks a few miles of the Pacific end will, on account of shallow water, have to be built in the ocean, and doubts whether the existing railroad company will sell out for less than 20 or 30 millions of dollars.

On the Same Topic.—The newspapers, during the past week, announced the fact that the Secretary of State had received the Report of Admiral Ammen, the representative of the United States government at the Paris Interoceanic Canal Congress. The report, after giving some general information respecting the projects proposed for a canal, is said to pass some severe strictures upon the schemes of the foreign engineers, and the manner in which these gentlemen ignored the careful and thorough reports of surveys presented by the engineers of this country. The report of this officer is further said to characterize the action of the conference as part of a well-devised plan to obtain control of this important prospective highway between the oceans; and the author warns the government that, unless some prompt measures are taken, the interests of American commerce will probably be at the mercy of the European powers, who would control the passage from ocean to ocean,

much of which is doubtless strictly correct. Indeed, it would be the height of self-complacent imbecility for the people and government of the United States to suppose that foreign engineers would gratuitously devote their talents and energies to protect the interests and advance the commercial importance of this country. The United States has vastly more to gain, directly and indirectly, in the construction of the canal across the American Isthmus than European nations, and vastly more to lose, should the control of this prospective highway of the world's commerce, by reason of our own unfortunate indecision or indifference, be allowed to pass into the hands of Europeans. But "God helps those who help themselves;" and the moral of the Paris Conference is, that, if the United States would protect the interests of her commerce, the policy of the government respecting the canal should be clearly defined without delay, and then firmly and intelligently maintained. The time has at length arrived when some decided action should be taken, if it is ever to be taken, and when the indecision of the last twenty years or more, during which the canal project has been on the *tapis*, must be put aside, if we would not see the greatest enterprise of the American Continent, and of paramount importance to the future prosperity of American commerce, by our own imbecility and indecision pass out of American hands, where it belongs, and relegated to the superior enterprise and intelligence of "foreign engineers."

The St. Gothard Tunnel, says the (London) *Times*, will, in all probability, be completed by the end of November, The point now reached on the Airolo side is 1281 meters, and that on the Goeschenen side, 649 meters from the center of the mountain. It is expected that the junction of the two headings will be effected about 300 meters from the center, on the southern side. The foregoing estimate makes no reference to the serious disagreement that has lately broken out between the Tunnel company and the contractor, M. Favre, which we reported in our issue of last week, and which threatened, from our latest advices, to bring the work to a stand-still until some compromise had been effected. The information which the *Times* imparts, of the progress already made on the tunnel is of interest, though its inferences may be seriously affected by the untoward event we have reported.

The Record of New Railroad Construction in the United States during the present year is given in the *Railroad Gazette* of June 27th as 732 miles, as compared with 482 miles completed during the same period of 1878, and 595 miles in 1877.

STRIKE OF PENNSYLVANIA COAL MINERS.—POTTSVILLE, PA., July 2.—The men at May, Audenreid & Co's colliery at Shamokin struck this morning for an advance of 10 cents on a wagon.

PITTSTON, PA., July 3.—The miners at the Seneca Colliery, at this place struck to-day, owing to dissatisfaction with the docking boss and weights. The colliery is operated by the Elmira Coal Company, and employs 300 men and boys.

THE LABOR QUESTION ABROAD.—The steam-coal colliers of Merthyr-Tydvil, in Wales, numbering 32,000 persons, have resolved to accept the masters' demand of a ten per centum reduction of their wages.

A TERRIBLE COLLIERY EXPLOSION IN SCOTLAND.—LONDON, July 3.—A dispatch from Glasgow states that a fearful colliery explosion occurred this morning at High Blantyre, near the market town of Hamilton, in the County of Lanark, eight miles southeast of Glasgow. The explosion is thought to have been caused by the peculiar state of the atmosphere, which, for some few days, has been in such a condition as to render the risks of explosion more imminent than usual. It is already known that fifty of the workmen in the colliery were killed, and it is feared that subsequent investigation will increase this number. The colliery was situated near Hamilton, which is one of the most handsome and interesting towns in Scotland, and gives the title of Duke to the Premier Peer of Scotland, a representative both of the illustrious house of Hamilton and of the male line of the Douglas family.

The news of the disaster spread rapidly throughout Blantyre, and was soon made known in Hamilton. Great crowds speedily assembled around the mouth of the shaft, and the usual scenes of excitement and terror and grief were enacted.

MONTANA MINING NOTES.

Special Correspondence of the Engineering and Mining Journal.

A. J. Davis, in his Lexington mine, Butte, has struck on the lowest level a vein of ore which averages over a thousand dollars to the ton. He has run over 30 feet in this kind of ore. Persons well-informed predict a large body of it. This strike will increase the value of the mine immensely, which was already the best paying and managed silver mine in the territory.

Ground has been broken by Supt. Pardee for the erection of the new and improved 20-stamp mill lately purchased for the Algonquin Company, Phillipsburg. It will be erected in Frost Gulch. They expect to commence running some time before fall.

Cheesman's flume, near Helena, is being rapidly pushed forward, and will soon open up some very valuable placer ground.

The amount of gold and silver, in the shape of retort, bars, and dust, handled in the U. S. Assay Office, Helena, during the month of May, 1878 and 1879, is as follows:

	1878.		1879.	
	Ounces.	Value.	Ounces.	Value.
Gold	1,939·60	$34,194.46	4,323·06	$71,122.86
Silver	19,849·51	23,492.31	37,898·00	40,867.01
		$57,686·77		$111,989.87

During the month of May, 1879, there was purchased at the United States Assay Office, Helena, $63,921.43 worth of gold bullion on government account.

Mr. Wickes, President of the Montana Company, has arrived with Mr. Daggett, an expert from Utah, and they have been carefully examining the property with a view of commencing operations again. Mr. Wickes has not divulged his plans or intentions yet, but the fact that they will commence running again is settled.

It has been raining pretty steadily throughout June, and, although the rain was a little late in coming this year, it will greatly benefit agriculture and placer mining. The placer mining season until recently promised to be unusually short, owing to a very limited supply of water.

The Northwestern Company, Phillipsburg, is in trouble again and has stopped running. Many radical changes are about to take place, which every one interested hopes will be for the better. Among them, a new superintendent is to be secured. This company has been shamefully mismanaged for some time. The workmen have not been paid for months, and are in open rebellion, and have even threatened the life of the superintendent; nor have bills incurred for supplies been paid any more promptly. During all this time, the company has been steadily producing bullion. What has become of it? is the query of the creditors, yet no one can satisfactorily answer it.

The Penobscot Company recently produced a gold bar worth $8000—the result of two weeks' run with thirty stamps. Ten additional stamps will shortly be placed in operation.

Mr. Chalmers, Jr., of the firm of Frazer & Chalmers, Chicago, recently arrived at Fort Benton, in charge of a 20-stamp mill which the firm has the contract for erecting for the Penobscot Company.

The Cable mill of Nolan, Savery & Co. has started up again, after an idleness of several years, on the rich ore struck in the old Cable mine some months ago. Mr. Savery is expected from the States soon, accompanied by Judge Hubbard, of Iowa, another member of the company.

The main shaft in the Alice mine is down about 445 feet. At the present rate of progress, the point for starting the 500-foot cross-drift will be reached early next month.

The Colorado & Montana Smelting Company, through its manager, Mr. H. Williams, has purchased of the Gagnon Mining Company the smelter erected at Butte by R. K. Williams. The present furnace will be removed, and another of suitable material and more improved form put in its place. The building will be increased by an addition, 50×156 feet, with shed, 22×40 feet, to be used as furnace-room, ore-rooms, etc. The company at first intended to erect only one reverberatory furnace, with a capacity of twelve tons per day, but finally decided to erect two, as the engine and machinery could furnish the power required. The works, as now designed, will consist of two reverberatories, capacity about 25 tons per day, two calcining furnaces, Blake crushers, Cornish rolls, etc., with power to work them. The work of construction has commenced, with Julian Smith, architect and builder of the Alice works, in charge. At present, no refining works will be erected by the company, as the intention is only to reduce the ore to a matte. From six to twelve tons of ore, according to its grade, will be reduced to one ton of matte, which, being ground and sacked, will then be shipped to the Black Hawk (Colorado) works for final treatment. This enterprise undertaken by such a strong and influential company will exert a powerful influence in the development of mines and mining around Butte, and will no doubt pay the investors handsomely.

TUBEROSE.

GENERAL MINING NEWS.

CALIFORNIA.

THE INYO MINES.

The *Independent* says:

"In the Kearsarge mine, the tunnel, about 600 feet from the surface croppings, is now opened a continuous vein 240 feet in length. The ledge matter at the face of the tunnel is 12 feet wide, in a perfect formation and carrying a vein of rich ore about one foot in width, which, at three points, widens to between three and four feet. Two of these ore-chutes have a respective length of 40 and 60 feet. The face of the tunnel, 940 feet in, is still in ore and on the same ledge. A number of lateral drifts have been run from the main tunnel, but the principal point of interest at present is in the west cross-cut, where a stringer of rich quartz, which is leading into the Kearsarge ledge proper, has been struck—the one which was followed down 97 feet by the winze in the old works, the cross-cut being 140 feet below the bottom of said winze. In this ledge or feeder are found small pieces of the same class of blue sulphuret ore as appear above, assaying into the thousands.

"A rumor prevails that the Union Consolidated, at Cerro Gordo, has made a heavy strike of lead ore in the long drift in the 900 level of the new shaft. Its course is southwest, and cuts under the old Jefferson deposit. The statement is made that 10 tons of ore can be taken out per day, and that the full extent of the ore-body is yet unknown."

BODIE DISTRICT.

We are indebted to the *Standard* of June 21st for the following:

"The main feature of the past week has been the continued rich development in the Bodie mine. The Standard's big new ledge still holds out, and, at the last point where tested, was 22 feet wide, of rich ore. The Tioga is doing most interesting work on its 520-foot level. The new machinery of Jupiter is working nicely, and good things may be anticipated from the mine ere long. The Noonday machinery will be got to work in a day or two, and is turning out ore steadily from the old shaft. Booker and Defiance are rapidly getting their new machinery in order. Judge McClinton has ordered fine new machinery for the Con. Pacific, the recent developments in that mine fully justifying the outlay. Dudley is taking out some very rich ore, and, as soon as the pumping machinery can be got in order, sinking for lower levels will be commenced. Altogether, this is the very brightest period in the history of the district thus far."

The north drift of the Standard east cross-cut on the 385 level has reached a total length of 243 feet. An upraise at this point, where the ledge is flat, is 22 feet in width in clean ore, which it is thought will mill over $100 per ton. The north winze of the Bodie mine is down about 45 feet below the 433 level, and continues in rich ore at the bottom. On the 520 level of the Tioga mine, stringers of quartz in the west cross-cuts are encountered two inches wide and upward, which pan well. The cross-cut is pushed as rapidly as possible to cut the Yerington ledge on the 320 level. The steam-pumps are nearly ready for work on the Mono mine, which is of considerable importance, as it will drain the Bodie as well as the Mono mine, and will allow both of these mines to open up their lower levels. The new machinery of the Jupiter is working well. The condition of this mine is such as to admit of rapid development, and its situation adjoining the Bodie and Standard mines gives it a very promising future. The Bulwer Consolidated mine turned out $242,000 in three months. This mine is looking well in all parts. The Bodie Company is taking possession of its own mill, which will create a temporary cessation of the product at present.

In the Summit mine, the workings look well. On the 400 level in the South Standard mine, the vein on the north drift shows an improvement. The Noonday, South Bulwer, and Syndicate are making satisfactory progress in the various workings, with promising results. Good milling ore is being extracted from the ledge in the 200 level of the Maryland Consolidated mine. The width of the vein is 2½ feet. In the North Noonday mine, new machinery has been intro-

duced, both above and under ground, and the most active work will be carried forward on all parts of the same. The Bodie Tunnel has a total length of 1034 feet, face in favorable ground. Work is being advanced at the rate of 15 feet per week. In the White Cloud, Booker, Bechtel, South Bodie, Champion, Richer, and McClinton mines, very active operations are going forward, with the best of prospects.

As a matter of record and special interest at this time, we append below, taken from the authority quoted, the closing prices of Bodie stocks for the week ending June 14th, 1879:

MINES.	9.	10.	11.	12.	13.	14.
Addenda	$0.70	$0.70	$0.70	$0.70	$0.75	$0.65
Bodie	47.00	44.50	44.50	44.50	46.25	38.75
Bulwer Con	12 00	11.75	11.50	11.25	11.75	11.50
Black Hawk	3.00	2.60	2.40	2.25	2.50	2.30
Belvidere	2.05	1.90	2.00	2.05	2.05	2.00
Booker Con	95	1.10	1.05	90	1.00	1.00
Bechtel Con	2.75	2.00	1.75	1.80	1.95	1.80
Champion	35	35	45	55	65	60
Con. Pacific	7.50	8.50	9.00	8.75	8.50	8.00
Chieftain	10	10	.....	.....	10	.....
Dudley	1.40	1.30	1.45	1.50	1.35	1.30
Defiance	1.50	1.50	1.50	1.50	1.35	.....
Double Standard	.....	.....	.....	50	.....	.....
Goodshaw	60	75	.....	75	70	70
Glyn-Dale	.....	.....	1.00	1.00	1.00	1.00
Jupiter	1.40	1.50	1.75	1.75	1.80	1.80
Mono	12.50	12.38	11.13	12.00	11.75	10.50
McClinton	1.40	1.20	1.35	1.40	1.35	1.25
May Belle	.....	45	30	30	30	.....
Mammoth	13.50	.....	12.75	11.50	13.25	14.50
Noonday	3.05	3.25	3.25	3.25	3.30	3.30
N. Noonday	95	90	1.00	1.00	1.00	.....
Orient	20	30	20	20	20	.....
Queen Bee	.....	40	50	55	80	80
Red Cloud	.....	.....	.....	75	70	.....
Standard Con	31.00	31.00	.....	.....	.....	.....
South Bodie	45	45	45	40	45	45
South Bulwer	1.50	1.45	1.50	1.35	1.30	.....
South Standard	20	20	25	30	30	35
Syndicate	4.50	5.00	4.60	5.00	4.95	5.00
Summit	2.00	2.25	2.10	2.30	2.50	2.25
Tioga	3.90	4.00	3.90	3.85	3.75	3.85
University	80	60	65	75	75	65
Vortex	1.00	1.00	95	1.00	95	90

THE MINERAL KING MINES OF TULARE COUNTY.

A correspondent writing to he *Mining and Scientific Press* of June 21st says: "The extent of the Mineral King belt proper is about 12 miles long and 3 wide, its center being some 50 miles east, and 15 miles north, of Visalia. Its general course runs west of north and east of south—with the usual trend of our mountain ranges—at an angle of about 24°. There are not less than six true fissure-veins in the district.

"The leading formations consist of carbonates of lime, mica schist or mica slate, gneiss, syenite, and porphyritic rocks, including several strata of trap-rocks. These porphyries and traps are the only signs of any later volcanic action in this mineral district. There has, as yet, been found no form of lava, no *scoriæ*, no pumice-stone, no lava. Yet almost in a straight line between this region and Mount Whitney—some 18 miles northeast of the former and 12 southwest of the latter—there are large masses of obsidian or smoky quartz, whichever it may prove to be. Some boulders of it are from three to five feet long, and are occasionally so vitreous and transparent, that, through pieces from six to eight inches thick, you can see the hand moved to and fro, and even distinguish the finger-nails.

"Of the veins, the White Chief, the Lady Franklin, and the Empire are the largest. The White Chief is on the extreme western boundary of the district. Its ores are sulphuret of lead (galena) and sulphuret of zinc in combination with silver. The Lady Franklin and Empire veins are near the center of the mineral belt, along a west and east line. The Lady Franklin ore is sulphuret of lead, with silver and iron. The ores of the Empire mine are of an entirely different character, comprising carbonate of lead in small quantities, and ruby silver, with some base metals and gangue rocks. In the Black Wolf, are found copper with sulphurets of iron and silver, copper being the chief element, amounting sometimes to 50 per cent. Another vein, called the Chihuahua, is rich in silver and lead, and contains a large percentage of antimony. In this ore, the sulphuret of lead sometimes amounts to 80 per cent. A small vein, called the Crystal lode, is richer in lead and silver than any yet discovered.

"Besides the above, there are many other veins appearing on the surface, that have not yet been proved to be fissure-veins. Among these, Amalgam Hill lode bears strong evidence of being a true fissure-vein, and so does Mineral Hill lode.

"Along the eastern boundary of this mineral belt, a large and well-defined lode of plumbago has been found within the last eighteen months, and some specimens of it are found to contain as much as $64 of silver per ton.

"With reference to amounts of ore, we may state that, on the dump of one claim of the White Chief lode, 1000 tons of ore may be seen. Assays of this ore give as high as $300 per ton silver, and none less than $40. On the dump of Lady Franklin lode, there are from 300 to 500 tons of ore. Its average assay is $80 silver per ton, and some 22 per cent lead.

"A number of tunnels have already been run as follows: In the White Chief, there is one about 280 feet long, the ore not yet reached, and work at present suspended. In the John Franklin lode—probably a slide or surface lode—a tunnel has been made over 70 feet. The longest tunnel yet constructed is in the Empire lode. It is already about 480 feet long, and is being pushed ahead at the rate of more than three feet every twenty-four hours. On the Black Wolf, one tunnel has been run 80 feet and work stopped; but on another part of this lode, a second tunnel is being pushed ahead night and day, and is now in about 100 feet. There is an important tunnel, intended to cross-cut several lodes, now in about 200 feet, and owned by the New England Tunnel and Smelting Company.

"Two years ago last fall, a water-jacket blast-furnace, with a Sturtevant blower, was erected by this New England Company. It failed to make bullion, but this failure is generally believed to have been intentional.

"Much interest is taken in the first work of the 30-stamp mill, which will soon be ready to work.

"The Empire mine ores have yielded, in assays, an average of $121 per ton, silver. It is also an interesting fact that, near the center of the district, there is a large deposit of magnetic iron, which can be made useful, if combined with silica, to form a flux for the absorption of sulphur from the numerous valuable ores."

THE RESTING SPRINGS DISTRICT.

The *Stock Report* says: "The principal mine in this district is the Gunsight, which has been opened about 450 feet in depth on the vein. The ledge is from five to eight feet thick, showing richer as it goes down. Two inclines have been sunk on the vein, and several drifts run, the lower being used as a working tunnel. The ore is chloride of silver, free milling, and carries from $75 to $150 in silver, and about $12 in gold, to the ton. The company has erected a ten-stamp mill, which will be running within the next 60 days. It is the opinion that there is ore enough in the stopes above the working tunnel to run the mill for a year, and ship not less than $40,000 a month in bullion. This mine is in Inyo County."

THE LAKE DISTRICT.

The *Lake Review* of recent date says:

"The Mammoth mine is showing better and stronger as the several drifts and cross-cuts are advanced. The great value of this property consists in the general distributicn of the precious metal throughout the vein; no barren spots, but working up to an average of from thirty to forty dollars per ton.

"The Jordan, an extension of the Mammoth, has fine prospects.

"The Don Quixote, True Blue, Armstrong, and several other mining properties, have commenced the work of development, and but a short time can elapse before their real merits will be settled.

"The Mammoth Tunnel is now in 410 feet from the first cross-cut, and at the distance of 400 feet a fourth cross-cut has been started to cut the ledge; it is now in 12 feet, the general character of the ore being the same as in the other cross-cuts, except of improved quality. The ledge is compact and solid, showing great strength. The tunnel is still being rapidly advanced. The cross-cut at the 300 is in about 50 feet, striking what is apparently the hanging-wall. The ore-body cut is fully 36 feet in width, and the richest ore ever taken from a mine is now being extracted from this cross-cut. Work on the drifts connecting the different cross-cuts is being pushed with energy, and preparations are being made to stope out the ore on a large scale. When these arrangements are completed, further milling facilities will be required.

"The Jordan has commenced work sinking a shaft, which is now down 20 feet. They have struck a fine body of high-grade ore, showing a fine five-foot ledge. The work of development will be pushed with all the vigor possible.

"The Headlight shaft is down 73 feet, and the cross-cut at the bottom of the shaft is in 12 feet of fine ore of the same character as that found in the Mammoth mine. As yet there are no signs of striking a foot-wall. This is a continuation of the Mammoth ledge. The shaft is about 600 feet from the Mammoth line, and 1000 feet from the Mammoth shaft, where the same ledge is cut, showing the same character of rock, and establishing the fact of the connection of the Mammoth ledge from the first cross-cut in the Mammoth tunnel to the Headlight shaft, a distance of about 2500 feet.

"The Monte Christo shaft is now down 73 feet.

"The Don Quixote started a tunnel 200 feet below its croppings. It is being driven rapidly, and, in a very short time, will prospect the ledge at that depth. The croppings of this company are large and strong, running from twenty to five hundred dollars per ton. The company will probably erect a mill during the summer to work its ore.

"The True Blue Mining Company will commence active operations the coming week.

"The Armstrong Mining Company is running a tunnel on the ledge, now in 35 feet. The ledge carries fine ore, and looks well, giving evident promise of developing a fine mine."

COLORADO.

The Wheel of Fortune mine, at Ten Mile, employs 75 men. Strikes are being constantly made on Sheep Mountain. Building is brisk at Ten Mile City, and lots are worth $500 each.

The case of Stevens & Leiter *vs.* James Williams *et al.*, or what is known as the "Iron Mine suit," has been revived. A decision was made last winter, giving the owners of the mine the right to follow the vein beyond the side-lines of their location. Judge Miller will hear the arguments and advise with Judge Hallett. This will be one of the most important cases yet tried in Colorado, and a large number of experts will be introduced in the case.

The Song Bird mine, at Silver Cliff, has made a strike which doubles its value in the estimation of its owners. The suit between the Johnny Bull and Domingo mines has been decided in favor of the latter.

The Little Pittsburg Consolidated Mining Co. has filed an answer in the suit brought against it by S. H. Foss and A. V. Hunter. An agreement between C. R. Bissell, S. H. Foss, and A. V. Hunter on the one part, and Jerome B. Chaffee on the other, for a sale of the interests of the parties of the first part is introduced, and shows that the stockholders of the Little Pittsburg can not be disturbed in their rights.

Reports from Leadville speak of new and important discoveries of ore being made in that camp. The recent strike in the Highland Chief is said to be very rich. This mine is about three miles east of the Little Pittsburg, and is on Bruce Hill. The Highland Chief mine has, at a depth of 110 feet, about 10 feet of mineral. Placer-mining is reviving in the gulches about Leadville.

The Highland Mary, Highland Chief, Guilderoy, and Robert Burns mines, situated on Mount Bascom, near Leadville, have been consolidated.

Considerable work is being done in the San Juan region. Some very rich discoveries have been made on Junction Creek, a tributary of the Animas River, in La Plata County. At the Aspen mine, they have 100 tons of ore, said to average 175 ounces of silver and 55 per cent of lead.

The Highland Mary mine has made another rich strike of mineral in the west drift of No. 2 level of the cross-cut tunnel, and the width of the ledge averages about 18 inches, ten of which are splendid rich copper and quartz ore.

The London mine, near Fair Play, has made a very rich discovery, the quartz showing free gold all through. Several pounds of the ore were assayed, and gave 1217 ounces of gold, and 375 ounces of silver, to the ton.

The Holland smelting-works, including the Baltic and Condor mines, located near Fair Play, have been sold for $20,000 cash.

GEORGIA.

We are indebted to the *Dahlonega Signal*, of June 28th for the following notes:

"A rich strike was made in the Dahlonega mine on the 23d inst. The new 40-stamp mill of the Findley mine will be completed in about 60 days. Operations in all parts of the Findley mine are going forward satisfactorily with promising results."

MISSOURI.

THE SILVER MINES OF SOUTHEASTERN MISSOURI.

The *Kansas City Review of Science and Industry* for July says:

"Hon. B. B. Cahoon, of Fredricktown, Mo., states in an interview reported in the *Plaindealer*, that the silver mines of Southeast Missouri will soon give to that region unprecedented prosperity. He states that one silver mine (that at Silver Mountain) has already been sufficiently opened, by following beneath the rocky surface a true fissure-vein of argentiferous galena, bearing silver yielding from fifteen to ninety ounces to the ton, from which, even now, when it is not yet fully opened, over one hundred tons of ore can be taken out per day, which will yield a net profit of at least $50 to the ton. This is the situation of this mine in its infancy. Already the company operating this mine has over five thousand tons of ore out, and its yield from the surface was such that the ore now out will more than pay for opening the mine, erecting the present works, improvements, etc., now nearly ready to begin the crushing and smelting of the ore, and which, experts inform me, are cheap if they have not cost more than $175,000. Any person acquainted with the geological characteristics of the volcanic region bordering upon the St. François and Castor rivers, and who has given attention to the matter of what rocks are necessary to be in juxtaposition to bear silver, must be convinced that the granite and porphyry formation, interspersed as it is with veins of quartz, which lines these rivers and the territory adjacent to them, as it runs from the lower part of St. François County through Madison, Wayne, and Reynolds counties, is silver-bearing, and that it is not too sanguine to believe that this silver

found and already exposed at the Silver Mountain is but the outcropping of the same true fissure-vein which permeates those regions. I am convinced that a short time will demonstrate that we have silver in profitable quantities."

MONTANA.

THE PENOBSCOT MINE.

The superintendent, writing under date of Vestal, Montana, June 13th, says: "The vein mentioned in my last, about 30 feet east of the Snowdrift shaft adit drift, gives all indications so far of being another vein. We have now driven on it eight feet, and so far it shows good foot and hanging-walls. The vein is three feet in width, good clear quartz, and prospects fair. The cross-cut in the foot-wall on the 200-foot level east, is showing quartz and slate mixed. If the vein is in the foot-wall, I shall be able to determine in a few days. The other openings and stopes are looking well. The mill is running steadily forty stamps."

THE HECLA QUARTZ MILL BURNED.

VIRGINIA CITY, June 27.—A fire at Glendale, on Wednesday last, destroyed the smelter quartz mill of the Hecla Mining Company, the most extensive works of the kind in that vicinity. The loss is estimated at $100,000.

THE MINES AT GLENDALE.

From the Butte *Miner* of June 24th we condense as follows: About 300 men are now employed in the Trapper mines and 20 on the road leading from the mines to the smelting-furnace Both furnaces are in full blast, and average about 50 tons per day; 50 wagons are employed hauling ore, etc., and 20 men have constant employment burning charcoal for fuel.

The bullion shipped from Butte, for week ending June 23d, was $34,000.

NEVADA.

COMPLETION OF THE SUTRO TUNNEL.

The Sutro Tunnel, commenced some ten years since for draining the Comstock mines, was completed on June 30th, within the stipulated period. This splendid engineering undertaking, of the progress of which we have furnished detailed accounts, and which has cost about $6,000,000, has proved on its first trial a complete success. The Hale & Norcross and Savage mines, which have been flooded the past few months, commenced the discharge of their waters into the sluice-boxes on the morning of the 30th ult., the water making its appearance at the mouth of the tunnel in one hour and twenty minutes from the first flow. The powerful joint engine of the combination shaft operated the discharge. In eight hours the water had subsided 100 feet. Meanwhile the temperature of the outflow had increased from 101° to 118°. The sluice-boxes which are of three-inch tongue and grooved Sierra Nevada pine, did not exhibit a leak. It is anticipated that the lower depths will shortly be free from water. In the course of two weeks, the process of draining the whole of the mines in connection with the tunnel will be proceeded with. It is calculated that one of the double line of sluice-boxes has sufficient capacity for the work. With the opportunity of working uninterruptedly in the lowest depths of the drowned-out mines, a large yield of valuable ore is anticipated by many, several of the mines having proved most profitable just before their lower levels were submerged. The success achieved was celebrated on the night of the 30th by bonfires on the mountain tops overlooking the Washoe silver region and the Carson Valley. This engineering triumph should tend to enhance the value of a number of mines on the Pacific slope, which merely await similar means of drainage to develop large bodies of rich ore.

THE DEVIL'S GATE DISTRICT.

The Sutro *Independent* of June 19th says:

"The Devil's Gate and Chinatown Mining District is looking up. During the past week, operations were resumed in three of the mines in it, to wit: the Atlantic Consolidated, the Kossuth, and the Niagara. All of these mines have good prospects. The Niagara has a two-inch streak of ore which may lead to something of value; the Atlantic has a well-defined vein of considerable width, assaying well; and the Kossuth has quite a lot of ore in the upper levels, which may yet develop into a bonanza. Arrangements have been made to start up the Excelsior mill on Kossuth ore as soon as a quantity equal to the crushing capacity of the mill can be extracted. If the ore pays the cost of milling and mining, operations will at once be resumed on a large scale. If this is done, the Dayton Company will doubtless start up its works, and the Daney will promptly follow suit. The resurrection of the district will then be accomplished."

THE COMSTOCK.

From the mining summary in the Gold Hill *News* of June 25th we extract the following:

"The running of the west cross-cut on the 2300 level of the Union has been almost as disastrous to its friends as were the cross-cuts on the 2200 level of the Sierra Nevada. And this disaster has been mainly on account of a total misunderstanding of the position there on the part of every body. Even those best posted and most interested were sadly at fault, and every body went astray in consequence.

"At length, just as the cross-cut begins to show better rock, the facts in regard to the situation in the Union come out. The south drift from which the cross-cut is run bears by actual measurement 22½ degrees east of south.

"Aside from preparations for drainage, there is a vast amount of get-ready work going on from the Bullion to the Belcher. These reports are full of interest as indicating the future. Alta is also as interesting as usual.

"The bonanza folks are retimbering the old Latrobe tunnel in a most substantial manner. The mouth of this tunnel is in the eastern suburbs of Virginia, near St. Mary's Hospital. It was the first grand tunneling project undertaken in the early days. It is of large size, and when first run was timbered thoroughly with heavy timbers, most of which were hewn. It runs under the whole width of the city, and back into the Mount Davidson ridge some distance."

IMPORTANT CONSOLIDATION OF AMERICAN FLAT MINES.

The same authority observes:

"There have been rumors of a combination of several mines located on American Flat to resume prospecting there on a grand scale, and to sink a combination shaft through which to conduct operations.

"The mines entering into this combination are the Baltimore Consolidated, American Flat, Maryland, Segregated Rock Island, Pacific, and Rock Island. Next week a meeting will be held to incorporate this consolidation, and immediately thereafter the location for the new shaft will be selected. This shaft will be immediately pushed to a depth of not less than 2500 feet, and, while the work is going on, prospecting will be resumed through the Baltimore Consolidated shaft, which has already attained a depth of 1450 feet.

"There are capitalists East who are ready to take hold of this project and push it forward with energy. It is proposed to do the work without levying any assessments for the time being, as those interested East will furnish running expenses. It is thought that enough ore can be taken out of the mines of the combination to run a small mill which will be put up hard by, and that not less than $15,000 per month can be shipped. This no one will doubt who has been through the workings from the Baltimore Consolidated shaft, and has seen the ore-vein there. It was encountered as near the surface as the 250 level, and followed by a winze 120 feet, and was cut on various other levels below, and found to contain good milling ore, some of which, taken out while prospecting, has been reduced and found to pay well.

"The mines joining the combination are among the oldest on the lode, and have been held and worked since 1859. The vein, as disclosed in the Rock Island, is one of great promise. It was found to be 270 feet wide on the 450 level, and to widen to 400 feet on the 850 level, and to contain quartz and low-grade ore in abundance. Other mines have shown equally good indications. The project is an important one, and the evidences are that success will attend it."

THE PARADISE DISTRICT.

Rich ore has been found in a new opening on the Ethan Allen mine in Willow Creek District. It assays $186.67 in silver to the ton, and contains 65 per cent lead.

A new town, called Queen City, has been laid out near the Paradise Valley Company's mill on Martin Creek.

The Solid Silver mine is looking well. The shaft is down 40 feet, and a contract has just been let to sink it 25 feet deeper. The owners have a 4½-foot vein, and are taking out plenty of free milling ore.

It is anticipated that the Bullion mine will produce $1000 per day during the present month.

Work on the Mount Rose mine is progressing very finely. The incline from the end of the lower tunnel is being rapidly driven ahead, and the ledge at the bottom is very fast improving, both in size and in the quality of the ore.

NEW HAMPSHIRE.

The New York *Tribune* of July 2d contains the following:

"LEBANON, N. H., July 1.—Ores have been discovered on a farm near this village which the State Assayer of Massachusetts, after examination, has pronounced to contain gold and silver."

UTAH.

THE BUCKHORN DISTRICT.

We are indebted to the Salt Lake *Tribune* of June 28th for the following:

"The correspondent says of this district that it is rich in milling ore, several veins having been discovered carrying gold, silver, and copper, which, however, assay small. It is said that the whole country rock of this district assays $3 per ton in silver. The rock is composed of quartz, quartzites, spar, slate, talc, porphyry, and granite. The Silver Hill Tunnel Company is the principal mining company here.

"The outlook in the Ohio District is promising. Considerable activity is noted in the various developments. The owners of the Sunday mine have commenced running a tunnel 300 feet below the croppings and expect to tap the vein 200 feet below the present workings. This is a very promising gold mine. The receipts of bullion for the week ending June 27th at Salt Lake City amounted to nearly $107,000."

NEW PATENTS.

The following is a list of the new inventions relating to Iron, Coal, Mining Machinery, Chemical Apparatus, and the treating of Precious Metals, etc., from *The Official Gazette of the United States Patent Office*, for the week ending June 24th, 1879:

No. of Patent.	*Title of Invention.*	*Name of Inventor.*	*Residence.*
216,740	Ore-Separator	Horace W. King (a)	Alden, N. Y.
216,750	Rolling-Mill	Andreas Mechwart	Buda-Pesth, Hungary.
216,752	Hydraulic Pump for Testing-Machines	Tinius Olsen	Philadelphia, Pa.
216,759	Surveying-Instrument	T. F. Randolph	Cincinnati, O.
216,760	Electric Light	James Harris Rogers	Washington, D. C.
216,787	Apparatus for Stopping and Reversing Machinery	George C. Gill (b)	Brooklyn, N. Y.
216,793	Electric Telephone	John H. Irwin	Philadelphia, Pa.
216,807	Coal-Breaking Machinery	William H. Richmond	Scranton, Pa.
216,815	Hoisting Device	Daniel Abrey	Greenville, Mich.
216,818	Balance Steam-Engine	James O. Baird (c)	Brooklyn, N. Y.
216,826	Dynamometrical Governor	Ernest A. Bourry	St. Gallen, Switzerland.
216,840	Mechanical Telephone	Edwin D. Finch	Stanton, Mich.
216,859	Steam-Generator	John T. Kelly	Pittsburg, Pa.
216,897	Pump	George W. McKenzie	Harrington, Me.
216,887	Sectional Boiler	N. W. Pratt (d)	New York.
216,910	Dephosphorizing Iron	Sidney G. Thomas.	County of Surrey, England.
216,922	Governor for Engines	Samuel Whinery	Wheeler, Ala.
	RE-ISSUE.		
8,778	Steam and Air-Brake	B. W. Smith and E. O. Frink (e)	Rockport and Indianapolis.

(a) Assignor of one half his right to Robert Dunbar and George H. Dunbar. Buffalo, N. Y.
(b) Assignor to R. Hoe & Co., New York.
(c) Assignor to himself and Joseph Boyce, same place.
(d) Assignor to George H. Babcock, Plainfield, N. J., and Stephen Wilcox, Brooklyn, N. Y.
(e) Assignors to James A. McKenzie, Indianapolis, Ind.

PROPOSALS.

For the benefit of many of our readers, we compile weekly such proposals and solicitations for contracts, etc., as may be of interest. The table indicates the character of proposals wanted, the full name and address of parties soliciting, and the latest date at which they will be received:

Sea-Wall at the United States Barge Office, New York; James G. Hill, Treasury Department, Washington, D. C	July	7,	1879
Repairing, Painting, and Furnishing New Furniture, Public Schools; Board of Education, New York	"	"	"
Outside Iron Stairway; Board of Trustees, 9th Ward Common School, New York City	"	"	"
Dike and Wing Dams; S. T. Abert, U. S. Civil Engineer, 1907 Pennsylvania avenue, Washington, D. C	"	"	"
Steam Heating and Ventilating Apparatus; Board of School Trustees, 21st Ward, New York City	"	8,	"
Steam Heating and Ventilating Apparatus; Board of School Trustees, 22d Ward, New York City	"	"	"
Freight Pier at Perth Amboy; R. H. Sayre, Supt. and Engineer, E. & A. RR., Bethlehem, Pa	"	10,	"
Carrying the United States Mails; D. M. Key, P. M. General, Washington, D. C	"	"	"
Iron Superstructure for Chaudière Bridge, 12 spans; P. Alex. Peterson, Government Engineer, Montreal, Canada	"	"	"
Pavement around Three Sides of Court-House; W. K. Sproule, Auditor, Indianapolis, Ind	"	11,	"
Levees, Mississippi; T. S. Anderson, Greenville, Miss	"	14,	"
Paving; Allan Campbell, Commissioner of Public Works, New York	"	7,	"
Hardware, etc.; Commissioners Charity and Correction, New York City	"	"	"
Constructing Steamer Fish-hawk, Labor and Materials; John Rogers, Rear-Admiral U.S.A., Washington, D. C	"	16,	"
Four Highway Bridges; County Commissioners, Westminster, Md	"	21,	"
Iron Bridge; Board of City Commissioners, Cincinnati, O	"	22,	"
Labor of 160 Convicts to Let; Warden Illinois State Penitentiary	"	23,	"
Gas-Works; W. K. Sproule, Auditor, Indianapolis, Ind	"	24,	"
Bridge; W. K. Sproule, Auditor, Indianapolis, Ind	"	25,	"
Narrow-Gauge Locomotive; Chief Engineer St. John's & Indian River RR., Titusville, Fla	Aug.	15,	"
100,000 tons of Steel Rails to be Manufactured in New Zealand; John Knowles, Under Secretary for Public Works, Wellington, New Zealand	Sept.	30,	"

STATISTICS OF COAL PRODUCTION.

This is the only Report published that gives full and accurate returns of the production of our Anthracite mines.

Comparative statement for the week ending June 28th, and years from January 1st :

TONS OF 2240 LBS.	1879.		1878.	
	Week.	Year.	Week.	Year.
Wyoming Region.				
D. & H. Canal Co..	78,693	1,475,466	13,170	899,492
D. L. & W. RR. Co.	82,204	1,674,449	44,083	888,185
Penn. Coal Co.....	30,514	658,598	28,470	350,737
L. V. RR. Co.....	37,215	464,552	1,114	368,492
P. & N. Y. RR. Co..	1,198	13,123	934	13,066
C. RR. of N. J.....	*.....	826,419	2,968	404,283
Penn. Canal Co.....	15,086	148,912	13,596	114,382
	244,910	5,255,519	109,335	3,039,087
Lehigh Region.				
L. V. RR. Co.....	100,473	1,505,580	38,587	1,052,276
C. RR. of N. J.....	*.....	940,105	21,028	551,762
S. H. & W. B. RR...	.....	12,580	.....	12,005
	100,473	2,458,265	59,615	1,616,043
Schuylkill Region.				
P. & R. RR. Co	173,702	3,391,549	192,484	2,089,742
Shamokin & Lykens Val....	11,707	382,721	34,590	298,278
	185,409	3,774,270	227,074	2,388,020
Sullivan Region.				
Sul. & Erie RR. Co.	1,609	26,539	987	15,588
Total	532,401	11,514,593	397,011	7,058,738
Increase.....	.....	.....	.....	.....
Decrease	.....	.....	.....	.....

The above table does not include the amount of coal consumed and sold at the mines, which is about five per cent of the whole production.

* These reports were not received.

The increase of shipments of Cumberland Coal over the Cumberland Branch, and Cumberland and Pennsylvania railroads, amounts to 58,273 tons, as compared with the corresponding period in 1878.

Statement of Coal Business at Fair Haven for the week ending June 28th :

	Tons.
Receipts.	547
Shipments....	549
On hand June 28th.....	34,890

Belvidere Delaware Railroad Report for week ending June 28th :

	Week.	Year. 1879.	Year 1878.
Coal for shipment at Coal Port (Trenton)	1,035	4.525	1,320
Coal for shipment at South Amboy	11,542	231,092	236,398
Coal for distribution.....	7,434	162,865	79,540
Coal for Company's use	2,013	40,924	39,324

Receipts and shipments of coal at Chicago Ill., for the week ending June 28th, and year from January 1st :

	Week. Tons.	Year. Tons.
Receipts.....	40,845	980,097
Shipments.....	10,257	198,227

Perth Amboy Business :	Tons.
Received for the week	38,566
Shipped for the week....	45,072
On hand June 28th.	116,902

The Production of Bituminous Coal for the week ending June 28th was as follows :

Tons of 2000 lbs., unless otherwise designated.

	Week. Tons.	Year. Tons.
Cumberland Region, Md.		
Tons of 2240 lb	37,169	708,662
Barclay Region, Pa.		
Barclay R. R., tons of 2,240 lbs.....	6,562	171,589
Broad Top Region, Pa.		
Huntingdon and Broad Top R. R.....	2,757	69,627
*East Broad Top.....	1,356	30,315
Clearfield Region, Pa.		
*Snow Shoe...	1,483	14,467
*Tyrone and Clearfield.....	31,442	600,908
Alleghany Region, Pa.		
*Pennsylvania R. R	4,020	78,860
Pittsburg Region, Pa.		
*West Penn R. R....	2,864	85,722
*Southwest Penn. R. R.....	468	16,944
* Penn & Westmoreland gas coal, Pa. R. R.....	703	334,070
*Pennsylvania R. R.....	11,931	194,105

*For the week ending June 7th.

The Production of Coke for the week ending June 7th :

Tons of 2000 lbs.	Week	Year.
Penn. R R. (Allegheny Region).....	1,040	69,155
West Penn R. R....	11,055	20,308
Southwest Penn. R. R.....	21,350	42,037
Penn. & Westmoreland Region, Pa. R. R.	14,296	381,799
Pittsburg, Penn. R. R.....	3,160	61,076
Total...	40,901	574,375

THE COAL TRADE REVIEW.

NEW YORK, Thursday Evening, July 3, 1879.

Anthracite.

There have been two causes for a very quiet week's business—one a general advance of about 10c. per ton on circular prices and another the approach of a national holiday. This quietness is not unusual to this time of the year ; it has almost invariably occurred in past years.

It is generally believed in the trade that dealers and consumers are, as far as all early requirements are concerned, very liberally supplied with coal, and that during the next thirty or forty days they will purchase very little. Under the circumstances, we therefore look for some difficulty by those who have advanced their circular prices in sustaining them.

A dispatch announces that the miners at May, Audenried & Co's colliery, at Shamokin, struck yesterday for an advance of 10c. on a wagon. This is the only important item of news in the labor situation. The outlook for a peaceful season does not improve.

The indications still continue favorable to a very large business during the latter portion of this year.

As an evidence of the very large business the Philadelphia & Reading Coal and Iron Company is doing, it is said to be taking all the surplus coal of the Delaware & Hudson Canal Company.

The Philadelphia *Ledger* of June 30th says :

"The anthracite coal trade presents a most encouraging outlook. All the elements of a prosperous trade stand out conspicuously. Though the supply of coal to the end of the first summer month is about four and three quarter millions of tons in excess of last year's production to the same date, the stock of coal on hand was never before so light, except, perhaps, during some long strike. The piers at Port Richmond are nearly bare of coal ; the Lehigh Valley Railroad Company, the Pennsylvania Railroad Company, and the Lehigh Navigation Company all and severally make the same statement, namely, that their orders for coal are so very full that they can not meet them. The year's production of coal is already very large as compared with the production of the year 1878, when it was restricted by combination among producers. Among other reasons for the large supply coming forward and the full and prompt marketing of the same, may be mentioned the empty bins and coal yards at the beginning of the present year, the very large supply of anthracite coal going West, where that description of coal never found a market before, and the general and hearty revival of the iron trade. The manufacture of iron and steel uses up immense quantities of coal fuel. Foundries, furnaces, and rolling-mills are most rapacious consumers of coal, and thrive mostly from that on which they feed. Nearly all the coal cormorants in this pursuit, not only those in this State, but elsewhere pretty much all over the country, are in active operation, and, in addition to the increased consumption by our steam marine and in other steam generating uses, the demand for coal is very strong, and, it is believed, will take nearly all that can be produced, which will be over 20,000,000 tons."

Bituminous.

There is but very little doing in this coal, and nothing of importance to note in any department. The belief is expressed that some companies which are offering to sell coal at very low prices at Baltimore are receiving secret concessions from the Baltimore & Ohio RR. The prices of bituminous coal do not improve, nor is there any likelihood of their doing so before an advance in anthracite coal becomes an actual fact.

We publish the following letters from our regular correspondents.

"CINCINNATI, June 26.

"During the past few weeks, the stock of Youghiogheny coal has been nearly cleaned up. The small stock that is here is, for the most part, coal that has been in yard a good while, and considerably depreciated in quality. It has been many years since the price of Youghiogheny coal in this market has been so small as it is to-day ; yet good Youghiogheny coal can be bought by the consumer at 12 cents per bushel. Ten or fifteen years ago, had such a state of things occurred in the coal market, the consumer would have had to pay somewhere from thirty to sixty cents per bushel for the same coal. Youghiogheny coal is no longer king in this market. Our railroads now strike good coal mines in all directions within 150 to 200 miles, and they will in the future protect us from coal famines.

"The Consolidated Coal and Mining Company is bringing Pittsburg coal by railroad that it can retail at 12 cents per bushel. It is bringing Del Carbo coal from the Cincinnati & Muskingum Valley Railroad it they can retail at nine cents per bushel.

"The anthracite market continues in rather a demoralized state. Although prices have been advanced by most shippers from 20 to 50 cents per ton, yet the dealers have nearly all got coal coming in that was bought when prices were lowest, and they are all selling at a small profit on the actual cost."

Per bushel of 72 lbs.

	Retail delivered.
Youghiogheny.....	14c.
Kanawha River...	12c.
Camden.....	9c
Pittsburg, all rail coal.....	12c.
Del Carbo	9c.

	On cars.	Delivered.
Lack. & Wilkes-Barre.....	$4.00	$5.00
Sugar Loaf Lehigh.....	5.10	6.00

"CLEVELAND, June 26.

"The extreme low price of anthracite coal continues to have a depressing effect upon bituminous coal. The Canadian market, which usually buys large quantities of soft coal from this market, seems to be filling up with hard coal, and, outside of a few railroad and government contracts, is taking but little coal from here.

"The up-lake trade is fair at very low prices, while freights are firm and vessels scarce. Grain vessels unloading at Buffalo are promptly chartered for hard coal from that point, and we have to rely here upon vessels in the ore trade. The increased activity in the iron-mining region, and the wants of the country beyond Duluth, demand more coal this year than usual, and the Lake Superior trade is good."

"LOUISVILLE, Ky., June 28.

"There is scarcely any Pittsburg coal in this market. The Kentucky is received daily by rail. The demand is very dull on account of advance in prices."

Wholesale per bushel of 72 lbs.

Pittsburg in river.. .....11c. | Kentucky, on cars.....8½c.

Retail.

Pittsburg.	14c.
Raymond City.....	13c.
Cannel.....	16c.
Green River (Ky.)...	11c.
Pine Hill (Ky.).....	12c.
Coke.....	9c.
Anthracite, per ton.....	$6.25

Milwaukee. June 28, 1879.

Specially reported by Messrs. R. P. ELMORE & Co.]

Coal is moving slowly.

Retail price per ton of 2000 lbs.

Lehigh prepared, chippings.....	$6.00@ .....
" " lump.....	6.00 @.....
Lackawanna prepared (all sizes).....	5.00@ .....
Briar Hill.....	5.20 @.....
Steam coals.....	2.75@ 4.00

San Francisco. June 26, 1879.

COAL—Imports from Jan. 1st to June 1st :

	Tons.		Tons.
Anthracite	3,811	Cumberland	1,387
Australian	7,940	Seattle	63,458
Coos Bay	18,072	Tacoma.	845
Carbondale.....	746	Vancouver Isl'd.....	61,979
Carmel Bay.....	350		

The market continues without the slightest animation by reason of the light spot supply of Scotch, English, or Australian. The prospective arrivals are large, and for these far-off supplies there is not much disposition shown to purchase even at the present low and nominal rates offered. The large Pacific Coast supply, coupled with that from British Columbia, seems to be consumed as fast as it arrives at the low prices ruling. We quote California Mt. Diablo at $4@4.50 for steam ; Coos Bay and Seattle, $5.50@6 ; Nanaimo and Wellington, $7@8. The City of Chester from Victoria brought 500 tons Nanaimo ; the Alaska from Seattle, 2320 tons. We note a sale of a cargo of English steam, to arrive per ship Frank F. Curling, two months hence, at a private price. This makes three cargoes sold out of six that are known to be *en route*. At the close we hear of another cargo of English steam sold to arrive (1400 tons) private.—*Commercial Herald.*

New York.

Wholesale Prices of Anthracite Coal Delivery f. o. b. at Tide Water Shipping Ports, per ton of 2240 lbs.

	Lump.	Steamer.	Grate.	Egg.	Stove.	Chestnut.
WYOMING COAL.	$	$	$	$	$	$
§Lackawana, at Weehawken	2 55	2 55	2 55	2 60	2 90	2 75
*Pittston, at Newburg.....	2 25	2 25	2 25	2 30	2 55	2 40
Honey Brook Lehigh.....	3 25	.....	3 00	3 00	3 20	2 60
Wilkes-Barre at Pt. Johnson	2 60	2 60	2 70	2 85	3 20	2 60
Plymouth R. A. at P. John.	.....	.....	2 70	2 85	3 30	2 60
LEHIGH COAL.						
†Spring Mt. at P. Amboy....	3 25	.....	2 85	2 85	2 85	2 75
Old Company L., at Eliz'p't	3 40	.....	3 00	3 00	2 90	2 65
Cross Creek, at Port John.	3 20	3 20	3 00	3 00	2 90	2 65
†Buck M. at Eliz. Pt. or S. A.	3 00	2 75	2 75	2 75	2 85	2 75
Fulton.....	3 40	.....	3 00	3 00	2 90	2 65
SCHUYLKILL COAL.						
‡*Alongside at N.Y. Harbor.*						
Hard White Ash....	3 25	3 25	3 00	3 00	3 10	2 95
Free-Burning W. A.....	2 75	2 75	2 75	2 80	3 10	2 95
Schuylkill Red Ash.....	.....	.....	.....	3 25	3 40	2 95
Lorberry.....	.....	.....	.....	3 40	3 65	3 40
Lykens Valley Vein.....	.....	.....	.....	3 85	4 10	3 85

* Fifty cents per ton additional for delivery in New York.

† These prices are given by Whitney, McCreary & Kemmerer.

‡ On coal delivered f. o. b., at shipping wharf at Williamsburg, the current rate of harbor freight will be allowed from above prices.

§ F. o. b. at Weehawken, N. J.

Wholesale Prices of Bituminous Coal.

DOMESTIC GAS COALS.

Per ton of 2240 lbs.	At the Shipping Ports.	Alongside at New York.
Westmoreland and Penn.....	$4.25	.....
At Greenwich, Philadelphia	.....	$5.50
At S. Amboy.	5.00	5 50
Kanawha at Richmond	4.10	5.40
Youghiogheny, Waverly Co., at Balt ...	4.00	5.65
Murphy Run, West Va., at Baltimore. ..	3.75	5.85
Fairmount, West Va., " " ...	3 75	5.70
Newburg Orrel, Md. " " ...	3.75	6.00
Cannelton & Peytona Cannel, West Va.	....	10.00
" Splint " at Richmond.	6.00	7.00
" Gas Coal at Richmond	4.00	5.65

MANUFACTURING AND STEAM COALS.

Cumberland at G'n & Alexandria.	2.75@2.90	4.35@4.50
Cumberland, at Baltimore.	2.90@3.00	4.35@4.50
Cl'rfi'd "Eureka" and "Franklin."		
At mines.....	0.75	.....
At Baltimore & Phila....	3.25	4.50

FOREIGN GAS COALS.

	Sterling.	Am. cur'ncy
Newcastle at Newcastle-on Tyne.....	7s.6d.	$2 50@ $3.50
Liv. House Orrel, at Liv.....	25s.	13.00
Ince Hall Cannel " ....,	35s.6d.	18.00
" Gas Cannel "	25s.6d.	10 00@ 10.50
Scotch Gas Cannel, at Glasgow, nominal.....	25s.	7.50
	Gold.	
Bl'k House, at Cow Bay, N.S.	$1.60	....
Caledonia, at Pt. Caledonia.	1.50	$4.25
Glace Bay at Glace Bay....	1.50	4.00
Lingan, at Lingan Bay.....	1.50	....
Intern'l Mines, at Sydney...	1.60	....
Pictou, Vale Mines, at Pictou	2.00	4.70

Retail Prices.

Per ton of 2000 lbs,

Anthracite.

	G. & Egg.	Stove.	Chest.
Pittston coal delivered	$3.50	$3.75	$3.50
Lack. coal, delivered below 59th St.	3.50	3.75	3 50

FREIGHTS.

Coastwise Freights.

Per ton of 2240 lbs.

Representing the latest actual charters to July 3d, 1879.

PORTS.	From Philadelphia.	From Baltimore.	From Elizabethport, Port Johnson, South Amboy, Hoboken and Weehawken.
Alexandria			
Annapolis, Md	60		
Augusta, Me	1.85†		
Baltimore	46@60		
Bangor	1.45†@1.60		1.10@1.20
Bath, Me	1.25†		1.10@1.20
Beverly	1.50		
Boston, Mass	1.25@1.40		1.10@1.20
Braintree	1.40		
Bridgeport, Conn.			60
Bristol	1.30		
Brooklyn			
Cambridge, Mass.			1.10@1.20
Cambridgeport			
Charleston	1.10@1.20		
Charlestown			1.10@1.20
Chelsea			1.10@1.20
Danversport			1.10@1.20
East Cambridge			1.10@1.20
E. Gr'n wich, R. I.			
Fall River	1.15		90
Fredericksburg			
Gloucester	1.35@1.50		1.10@1.20
Hartford			1.10@1.20
Hingham			
Hyannis			
Key West			
Lynn	1.40		1.10@1.20
Marbleh'd, Mass.			
Medford			
Milton	1.50		
Nantucket			
Newbern, N. C.			
New Bedford	1.20@1.25		90
New Brunswick			
New Castle, Del.			
Newburyport			1.50
New Haven	85		60
New London	1.15		85
Newport			90
New York	80@85		
Newark			20‖
Norfolk, Va	60@70		
Norwich	1.20‡		95
Norwalk, Conn			
Pawtucket	1.30		1.05‡
Petersburg	85		
Plymouth	1.60		
Portland	1.35@1.45		1.10@1.20
Portsmouth, Va.			
Portsmouth, N.H.	1.50		
Providence	1.15		90
Quincy Point			
Richmond, Va	75@80		
Rockland			1.10@1.20
Rockport	1.60		
Saco	1.75		1.60
Sag Harbor			
Salem, Mass.	1.35		1.10@1.20
Saugus	1.40‡		
Savannah			
Somerset	1.20@1.25		90
St. John, N. B.			
Stamford			
Thomaston			
Trenton	40‖		
Troy			
Wareham			
Washington	80@85		
Weymouth			
W'lmington, Del.			

* And discharging and towing. † And discharging. ‡ And towing. § 3 cents per bridge extra. ‖ Alongside.

Lake Freights on Coal and Iron Ore.

Representing the latest actual charters up to July 1st, 1879.

From	To	Rate Per ton.	From	To	Rate Per ton.
Ashtabula	Chicago	$0.50	Erie	Chicago	$0.50
Black Riv.	Detroit	30	"	Portage	
"	Toronto	85	Escanaba	Ashtabula†	75
Buffalo	Cleveland		"	Cleveland†	60
"	Chicago	45	"	Sandusky†	75
"	Detroit	20	Fair Hav'n	Chicago	75
"	Milwaukee	45	"	Toronto	20
"	Portage	45	Fairport	Buffalo	
Cleveland	Chicago	50	L'Anse	Ashtabula†	1.25
"	Detroit	30	Marquette	Ashtabula†	1.25
"	Duluth*	75	"	Chicago†	1.10
"	Milwaukee	50	"	Cleveland†	1.30
"	Pt. Stanley	30	Portage	Chicago‡	1.10
"	Sarnia	30			

* RR. iron. † Ore. ‡ Iron ore.

Ocean Freights.

Ocean Freights on coal, iron, etc., per ton of 2000 lbs. to and from foreign and domestic ports, for two weeks ending July 2d, 1879, are given below.

DATE.	From	To	Cargo.	R'te
June 20	Boston	Newark	Bones	1.25
" 20	New York	Boston	Pig-iron	1.60
" 22	New York	Philadelphia	Salt	3½c
" 22	New York	Boston	Pig-iron	1.60
" 24	New York	Wash'gton, D.C.	*	1.00
" 24	Liverpool	New York	†	4½c
" 24	New York	Calcasieu Pass.	RR. iron	4.00
" 24	Perth Amboy	Charleston	RR. iron	1.50
" 27	Matagorda Bay	New York	Bones	7.00
" 27	Perth Amboy	Charleston	RR. iron	1.50
" 27	Perth Amboy	Boston	Pig-iron	1.50
July 1	Elizabethport	Richmond	Pig-iron	80c.
" 1	Georgetown	Aspinwall	Coal	4.75
" 1	Curacoa	Bridgeport	Salt	‡
" 1	Perth Amboy	Salem	Pig-iron	1.50
" 1	New York	Baltimore	*	1.35

* Phosphates. † Cannel coal. ‡ 10 cents per bushel.

IRON MARKET REVIEW.

NEW YORK, Thursday Evening, July 3, 1879.

American Pig.—The usual midsummer closing of works for repairs, stock-taking, etc., etc., and the approach of July 4th, has had the effect of producing a very quiet market. The indications, however, are favorable to a very active fall trade, and makers are very firm in their prices. Higher prices are looked for in No. 1 foundry iron, which is becoming very scarce. We should not be surprised to see a general advance inside of the next thirty days. In fact, one or more brands are now selling at $20. Those trying to purchase iron find few willing to listen to present prices for future delivery. We continue to quote No. 1 Foundry at $18.50@$19; No. 2 Foundry, at $17.50@$18; and Forge, at $16.50@$17.

The Tilly Foster mine, long and favorably known for the purity of its ores, has been purchased by parties in the interest of the Lackawanna Coal and Iron Company, of Scranton, Pa.

We understand that the mine is to be largely developed and the output of ore more than doubled in the near future. The sale was made through the agency of A. F. Wendt, M.E. The consideration was cash; and Messrs. John H. Cheever and C. W. Durand, the former owners of the mine and proprietors of the New York Belting and Packing Company, which met with serious losses by the defalcation of John G. Tappan, the Boston Belting Company's Treasurer, in July, 1878, have announced to their creditors that they will pay all their notes in full on three days' sight drafts. At the time of the Boston company's failure, the New York company was given three years' time by their creditors in which to meet their obligations. They propose, however, to take up all notes without waiting for them to mature.

Scotch Pig.—The usual summer quietness prevails with this article. We note the sale of 100 tons of Eglinton on private terms, and quote Eglinton at $18.50@$19; Coltness, at $22; Glengarnock, at $19.50@$20; and Gartsherrie, $20.

Messrs. John E. Swan & Brothers, of Glasgow, under date of June 20th, 1879, report 88 furnaces in blast, against 92 furnaces at same date last year. The quantity of iron in Connal & Co.'s stores was 270,642 tons (being the same amount in store last week). The shipments show a slight increase for the week, and an increase of 52,127 tons since Christmas, as compared with the same period last year. The imports of Middlesbrough iron in the same comparison show a falling of 30,131 tons. No. 1 Scotch pig-iron was quoted as follows: Gartsherrie, 45s. 9d.; Coltness, 50s. 6d.; Langloan, 48s. 6d.; Summerlee, 45s.; Carnbroe, 43s. 6d.; Glengarnock, 44s.; and Eglinton, 41s. 6d. Middlesbrough Iron was quoted, f. o. b., Tees, as follows: No. 1 Foundry, 37s.; No. 2, 35s. 6d.; No. 3, 33s. 6d.; No. 4, 33s.; and No. 4 Forge, 32s. 6d.

Rails.—There have been no transactions reported this week, although there still continues to be a very active inquiry. We quote steel rails at nominally $45@$47 at tide water, and iron rails at $37@$39.

Messrs. John H. Austin & Co., of London, under date of June 16th, quote ordinary iron rails, f. o. b. Tyne, Tees, or Wales, at £4 10s.; and steel rails at £4 15s.@£5 5s. at Liverpool, and £4 10s.@£4 15s., f. o. b. Wales.

Old Rails.—There is a very good demand for these. We quote at $23.

Wrought Scrap is very dull at $23.

We publish the following letters from our regular correspondents:

"BALTIMORE, June 30, 1879.

"This month closes with unusual activity in the iron market for this season of the year. Prices are very firm, with an upward tendency."

"LOUISVILLE, KY., July 1, 1879.

"The demand is remarkably good for this season of the year, and several large sales have been made for future delivery. Prices remain without change; the usual time, four months, is allowed."

"PITTSBURG, July 1, 1879.

"The metal market has been more active during the past week than for a long time past. Prices have advanced 50c.@$1 per ton, and it is believed the improvement will be fully maintained. Many expect to see a further advance within a short time, and holders are not inclined to sell very largely ahead at any such price as could now be obtained."

"RICHMOND, VA., June 30, 1879.

"I notice in your last the reproduction of my former table of quotations. It needs the following revision:

Anthracite, No. 1	$20.00@21.00
Wrought scrap, No. 1	17.50@19.00
Old rails	19.00@20.00
Freight, by sail, to New York	$1.80 for 2240 lbs.

"With the above exceptions, the table of quotations should stand."

"ST. LOUIS, June 30, 1879.

"There is no change in prices to report, and the condition of the market remains the same as last week."

METALS.

NEW YORK, Thursday Evening, July 3, 1879.

The approach of July 4th, as has been usual in past years, has brought with it a degree of quietness, but still there is a very active jobbing and consumptive demand, and the outlook in the metal trade is upon the whole very flattering.

RECEIPTS OF METALS AT NEW YORK FOR THE WEEK ENDING JULY 2D AND YEARS FROM JANUARY 1ST, 1878 AND 1879.

	1879.		1878.	
	Week.	Year.	Week.	Year.
Copper, bbls.	715	6,506	410	9,613
Copper, boxes				113
Copper, cakes	486	12,837	473	8,428
Lead, pigs	239	104,950	4,445	165,184
Spelter, pieces	6,865	59,962		26,100
Quicksil'r, flasks		4,375		683

Copper.—There is but very little business doing. The nominal quotation is 16⅛@16¼c.

London advices of the 20th ult. say:

"Holders of Chili bars are asking more money, and the business reported consists only of 50 tons, good brand, at £56, usual cash terms. At this figure there are further sellers, though only to a moderate extent, while most orders are limited to the old rate of £55¾ ℔ ton. We quote good ordinary brands £55¾@£56; favorite marks, £56@£56¼; best, £56¼@£57; Australian steady, though not much doing; Burra Cake, £62@62½; Wallaroo, £62½@£63. English firm, but quiet; tough cake, £59@£60; best select, £61@£ 2; India sheets, £64@£65; other sheets, £65@£66; yellow metal sheets, 5¼@5⅜d. ℔ lb."

London advices of the 16th ult. say:

"This morning the Chili telegrams came to hand advising charters of 1300 tons, and all for England, 900 tons being in bars and ingots, 400 tons in ores and regulus.

	1879.	1878.	1877.	1876.
Charters, January 1st to May 31st, tons	20,766	18,452	18,871	17,249
1st and 15th June	1,300	1,785	1,228	2,128
Exports, January 1st to May 31st	23,302	19,368	20,499	21,699
May only	4,700	3,261	3,241	4,812

"Price of bars at Valparaiso on 13th inst. was £17 12½s. exchange 31d.; taking steamer freight at 60s. would give £54¾ Liverpool, without merchant's commission.

"The smallness of the quantity advised has rendered sellers rather indifferent to accepting last week's prices, and though £55¾ cash has been taken for about 50 tons fair ordinary brands, the quantity so obtainable is comparatively trifling."

Tin.—There is a good jobbing business, but no large transactions have taken place. Straits, at London, is quoted at £65, and at Singapore at $19, with exchange at 3s. 11d. The shipments from the Straits to this country during the last half of June were 360 tons by steam and 50 tons by sail, making 620 tons for the whole month. There were also 200 tons of Billiton shipped during the month, making a total of shipments of 820 tons. We quote Straits here at 15½@15¼c.; L. & F., 14¾@15c.; Refined, 15c., nominal; and Banca, 17¼@18c.

London advices of the 20th ult. say:

"Tin was dull, and values rather lower. About 30 tons cash metal reported at 66⅛s.

Tin Plates.—We are reported sales of about 4000 boxes, mostly roofing. There is a good out-of-town demand in small lots. We quote per box as follows: Charcoal, bright, Melyn grade, ¼ X, at $6.37½@$6.25, and Allaway grade at $6@$5.75; charcoal ternes, Allaway grade, $5.50@$5.62½; coke, bright, B. V. grade, $5; and coke roofing, 14×20, $5.

Messrs. Robert Crooks & Co., of Liverpool, under date of June 19th, say of tin and terne plates:

"Sellers have shown more weakness during the past few days; but, in spite of this, there is an amount of inquiry

which makes further holding back of orders a matter of some risk. This is especially the case for other than ordinary sizes, as only these latter can be picked up out of stock. Of the different descriptions, demand is most brisk for charcoal ternes, and worst for coke ternes."

Lead.—Sales aggregating about 200 tons are reported at 3·95@4c. The market closes firm at that figure.

The Colima, for New York, via Panama, carried 32,355 lbs. base bullion.

Spelter and Zinc.—Some large transactions are reported to have taken place in spelter, which is now much firmer, being quoted at 4¼@4¾c. Sheet zinc has advanced, and is quoted at 6¼c. Manufacturers have put up their prices 15c. per cwt.

Antimony is dull. Cookson's is quoted at 11¾@12c., and Hallett's at 11⅝@11½c.

Quicksilver.—The San Francisco *Commercial Herald* of June 26th says: "The market is very dull and and languid, and can not be quoted more than 33@33½c. The Colima carried *en route* for Valparaiso 200 flasks. Small sales were made at the close of last week for Eastern account, as intimated above, at 33c.; but none now to be had under 33½c. It would seem that at this low price Eastern parties were disposed to stock up, but what could we do without the China (Hong Kong) demand!

"The Quicksilver exports by sea from June 20th, are as follows:

To South America per Colima hence 20th inst.:

	Flasks.	Value.
Thomas Bell	200	$5,202
Total	200	$5,202
Previously since January 1st	26,801	786,286
Total since January 1st, 1879	27,001	$791,488
Total same period 1878	15,968	531,508
Increase in 1879	11,033	$259,980

"Receipts for the week 1600 flasks."

THE BULLION MARKET.

NEW YORK, Thursday Evening, July 3, 1879.

Notwithstanding rather unfavorable exchanges with the East, silver has advanced in London, on a moderate demand for the Continent, acting on a market not very well supplied, and which, now that our government is buying weekly for coinage purposes, at the Philadelphia Mint (as we stated last week would soon occur), can not look for the usual amounts from this side.

DAILY RANGE OF SILVER IN LONDON AND NEW YORK, PER OZ.

DATE.	London	N. Y.	DATE.	London	N. Y.
	Pence.	Cents.		Pence.	Cents.
June 28	51 11-16	112¾	July 2.	52	113¾
June 30.	51¾	113	July 3.	52⅛@52¼	114¼
July 1.	51⅞	113½	July 4.		

BULLION SHIPMENTS.

We give below a statement showing the latest bullion shipments in addition to those announced in our issue of June 28th:

June 16th..Indian Queen	$4,318.00
" 16th..Northern Belle	2,276.00
" 17th..Cons. Virginia	44,282.00
" 19th..Alexander	7,096.00
" 19th..California	45,880.00
" 20th..Jackson	7,863.00
" 21st..Black Jack	9.741.00
" 21st..Ophir	20,044.00
" 21st..Kenton	1,927.90
" 23d ..Belle Isle	22,000.00
" 23d ..Independence	13,000.00
" 24th..Bodie Consolidated	37,000.00
" 24th..Hillside	4,500.00
Horn-Silver Mine.	Lbs.
On hand June 8th	837,021
Received during week from June 1st to 7th	326,665
Total	1,163,686
Shipped to Chicago and Omaha	167,912
	995,774

The May Bullion Products.—The *Bulletin* reports the following product of the Pacific Coast mines for the month of May:

GOLD MINES.

Black Bear Quartz	$11,400
Bulwer Consolidated	35,500
Excelsior Gravel	75,000
Golden Terra (Dakota)	20,000
Idaho (Nevada County)	42,200
Klamath Quartz	5,500
Mammoth (Mono County)	10,000
Milton Gravel	90,800
Noonday	4,800
Original Amador	7,500
Pittsburg	9,600
Plumas-Eureka	42,000
Sierra Buttes	31,500
Standard ($7800 in silver)	115,000
Total, fourteen gold mines	$500,000

*The list is five less than in April. The omitted mines are Bechtel Consolidated, Caledonia (Dakota), Homestake (Dakota), La Grange, Murchie, and North Bloomfield. The Bechtel Consolidated was without mill facilities, and hence did not produce any thing. All the others are supposed to have yielded the usual amounts; but for some reason we have been unable to get returns from them. The Mammoth mine of Mono County is added to the list for the first time. This mine has produced small amounts of bullion previously, and promises to be regular in its yield hereafter. The Bodie Consolidated mine, in the same county, has also commenced to yield again, but the Bulwer has been obliged to cease for want of a mill. The silver mines report their May product as follows:

SILVER MINES.

Alexander	$34,500
Argenta	53,600
Christy (Utah)	22,000
Extra	13,400
Hillside	67,000
Indian Queen	17,000
Independence	35,800
Leeds (Utah)	10,600
Manhattan	82,000
Martin White	43,500
New Coso	56,600
Northern Belle	40,400
Ontario	121,800
Raymond & Ely	19,700
Silver King	35,000
Star	18,900
Tip Top	30,600
Total, seventeen silver mines	$702,400

The above is an average list. In January, we had reports from 20 silver mines and in April only 15. The mines in the above list that were not in the April list are the Argenta, Leeds, New Coso, Raymond & Ely, and Silver King. The mines in the April list, but not in the May, are the Grand Prize, Highbridge, and Paradise Valley. The last named is building a 20-stamp mill, the lease of the Rye Patch mill having expired. The Silver King has renewed operations. The McMillan, McCrackin, and Hackberry, and other Arizona mines are doing nothing at present. The mixed metal mines make the following report for May:

	Gold.	Silver.	Total.
California	$131,900	$98,300	$230,200
Con. Virginia	83,000	70,300	153,300
Ophir	48,100	53,800	101,900
Trojan	4,000	6,400	10,400
Eureka Consolidated	66,700	*118,900	185,600
Totals	$333,700	$347,700	$681,400

* Including a value of $35,700 for lead.

The first four named are on the Comstock lode, and are the only ones out of scores of claims in Storey County that produced a dollar in May. The Sierra Nevada is producing some bullion this month. The Eureka Consolidated is the only one of the Nevada base-metal mines that has made any returns to us for May. The Richmond Consolidated, which adjoins the Eureka, and which is owned in London, is producing from $200,000 to $250,000 per month, but the officers decline to make reports. The thirty-six mines reporting for the fiscal month of May show the following gross bullion yield:

Gold	$826,700
Silver	1,022,200
Lead	35,700
Total	$1,884,600

The Richmond Consolidated Co. is now producing 950 tons of ore per week, which yields about $60 per ton.

Exports of Gold and Silver from New York.

Week ending June 28th	$80,018
Corresponding week last year	58,524
Since January 1st this year	10,934,482
Corresponding period last year	8,278,725

Gold Interest Paid Out at the Treasury.

Week ending June 28th	$57.727
Corresponding week last year	3,906,012
Since January 1st this year	27,808,617
Corresponding period last year	33,359,804

The Paris Mint has commenced the coinage of 14,800,000 francs in gold, silver, and bronze pieces for the Servian government. The die adopted is that of the Latin Union. Servia has no national money yet, and business has hitherto been transacted in the coins of the adjoining countries.

Gold and Silver Sent to China.—SAN FRANCISCO, CAL., July 1.—The steamer City of Tokio sailed to-day for Hong Kong by way of Yokohama, with the following treasure: Trade-dollars, 6857; Mexican dollars, 100,153; gold coin, $12,381; silver bars, $45,095.28.

The Silver Market Abroad.—LONDON, July 1.—The *Times* in its financial article this morning says: "There is not much business in silver, although the existing continental requirements are quite sufficient to absorb any moderate amount that may come into the market. There is still a complete absence of demand for India.

Government Silver Purchases.—WASHINGTON, July 2, 1879.—The purchases of silver bullion by the Treasury Department this afternoon were larger than they have been in any one week for a considerable time. Information as to the prices paid and the aggregate amount is, as usual, withheld. It has been learned, however, that every offer at or below the market rate to-day was accepted and all others were declined. The offers from San Francisco and Carson City were all above the market rate. The purchases to-day were for the Philadelphia Mint exclusively.

Gold and Silver Coin in the Treasury.—WASHINGTON, July 1.—The amount of gold coin in the Treasury to-day is upward of $135,000,000, a little less than the amount on hand January 2d. The amount of standard silver dollars in the Treasury has been increased from $16,697,338 on January 2d, to $28,147,351 on July 1st. The total amount of standard silver dollars coined up to July 1st is $35,801,700, and the amount issued to same date is $13,359,942. The total amount returned to the Treasury July 1st is $6,518,912, and the amount held in the Treasury on July 1st is $28,147,351.

It is estimated that there are 25,000,000 trade-dollars in China.

Coinage at the United States Mints.—WASHINGTON, July 1.—The coinage executed at the United States Mints during the fiscal year ended June 30th, 1879, was as follows:

GOLD.

Denominations.	Pieces.	Value.
Double eagles	1,861,717	$37,234,340.00
Eagles	103.144	1,031,440.00
Half-eagles	288,426	1,442,130.00
Three dollars	36,394	109,182.00
Quarter-eagles	466,720	1,166,800.00
Dollars	3,020	3,020.00
Total	2,759,412	$40,986,912.00

SILVER.

Denominations.	Pieces.	Value.
Dollars	27,227,050	$27,227,050.00
Half-dollars	450	225.00
Quarter-dollars	450	112.50
Dimes	450	45.00
Total	27,228,400	$27,227,432.50

MINOR COINAGE.

Denominations.	Pieces.	Value.
Five cents	23,500	$1,175.00
Three cents	32,800	984.00
Cents	9,563,900	95,639.00
Total minor coinage	9,620,200	$97,798.00
Total coinage	39,608,021	$68,312,142.50

The following is a statement of the coinage executed at the United States Mints during the month of June, 1879:

Denomination—Gold.	Pieces.	Value.
Double eagles	135,380	$2,707,600.00
Half-eagles	22,200	111,000,00
Total	157,580	$2,818,600.00
Silver.		
Dollars	2,315,050	$2,315,050.00
Half-dollars	50	25.00
Quarter-dollars	50	12.50
Dimes	50	5.00
Total	2,315,200	$2,315,092.50
Minor Coinage.		
Five cents	9,650	482.00
Three cents	50	1.50
Cents	2,111,050	21,110.50
Total	2,120,750	$21,594.50
Total coinage	4,593,530	$5,155,287.00

The following is a statement of business at the United States Assay Office, at New York, for the month ending June 30th, 1879:

Deposits of gold	$572,357
Deposits of silver (miscellaneous)	56,847
Colorado	39,794
Lake Superior	25,356
Montana	28,940
New Mexico	15,482
Utah	46,493
Total deposits	$212,916
Grand total deposits	785,274

Operations at the Philadelphia Mint.—PHILADELPHIA, June 30.—The coinage executed at the United States Mint for the month ending to-day shows the following:

Denomination.	Pieces.	Value.
Gold	21,380	427,600.00
Silver	1,312,200	1,312,092.50
Base	2,120,750	21,594.50
Total	3,454,330	$1,761,287.00

For the fiscal year ending to-day the coinage was as follows:

Denomination.	Pieces.	Value.
Gold	936,564	$11,329,352.00
Silver	12,125,850	12,124,882.50
Base	9,620,100	97,798.00
Total	22,682,514	$23,552,032.50

San Francisco Mint Coinage for June.—The San Francisco mint has been in operation only three weeks this month, and is now closed for the annual clean-up. The coinage for June was as follows:

Double eagles	$2,280,000
Half-eagles	111,000
Standard dollars	600,000
Total	$2,991,000

FINANCIAL.

Gold and Silver Stocks.

NEW YORK, Thursday Evening, July 3, 1879.

Between arrangements for going to the country and the coming holiday, business has been very much reduced. It is very probable, however, that there will be a great deal of speculation in the fall, and, from the advertising that mining schemes are receiving, not only in the city, but at the watering places and summer resorts, the mining industry will receive a very liberal amount of attention. Our report closes one day earlier this week, which partially accounts for the smallness of the business. Neither the Mining Exchange nor the New York Stock Exchange will open again until Monday. The San Francisco Stock Exchange closed last night, and will not open until Monday.

The Bodie stocks still continue to attract a great deal of attention, and, although none of them show really large transactions, yet the dealings are better distributed throughout the list. The great number of strikes that have lately been made in this district has given a great speculative tone to all the stocks, and those mines which are selling at low prices, and are without important developments, are taken up with the hope that a strike will be made.

Bodie has ranged from $47 to $50, with sales of 220 shares.

Standard was rather strong early in the week, selling up to $31¼ on Monday, but has eased off since, selling down to $29¼ to-day, but closing at $31. The total of sales for the week is 1360 shares. This company declared a monthly dividend of 50c. per share yesterday.

Bechtel has sold at $2@$2.20 with total transactions of 1030 shares. There were no transactions to-day.

May Belle has ranged between 60 and 70c., with sales of 500 shares.

On Saturday, 100 shares of Belvidere sold at $1.60.

Bulwer is attracting but little attention now, the sales for the week amounting to but 260 shares, at $10@10⅛.

Consolidated Pacific has been fairly active, with transactions amounting to 1965 shares, at 7¼@8⅝@7⅞.

To-day 300 shares of Goodshaw were sold at 90@95c. With this exception, there were no dealings during the week.

Tioga, although not particularly active, has been pretty strong, selling up to $8 yesterday, although down to $7½ to-day. The sales for this week amount to 705 shares.

A very good business has been done in the Comstock stocks. California has ranged between $5⅞ and $5¼, the latter price being reached to-day, although the last sale was at $5⅝. The sales aggregate 2281 shares.

Consolidated Virginia has followed a very similar course, ranging between $5¾ and $5¼, closing, however, at $5½. The sales of this stock amount to 4835 shares.

Yesterday 50 shares of Savage sold at $16.

Consolidated Imperial does not lose interest with the public, the sales amounting to 15,725 shares, at $1.90@$1.50, although closing at $1.75, buyer 30 days. The lowest price was reached yesterday, on the announcement of a fire on one of the levels; but it was afterward learned that it occurred in Yellow Jacket, after which an improvement set in.

Leviathan has been very quiet, the sales amounting to but 400 shares, at 72@70c.

Sutro Tunnel has been very active, the sales aggregating 10,421 shares, at $4¼@$4⅜.

In the Tuscarora stock we note sales of 1440 shares of Independence at $2.45@$2.75, the latest sales being made at the higher figure.

Hussey only records sales of 600 shares, at 15@18c.

Navajo has been very quiet and somewhat weak, the sales amounting to 500 shares at 50@40c.

The dealings in Tuscarora amount to 10,100 shares, at 12@15c.

In the Black Hills stocks we note sales of 290 shares of Homestake, at $38¼@$37.

Caledonia records sales of 560 shares, at $4@$3½.

Great Eastern has been quite active, the sales amounting to 10,200 shares, at 70@67c.

In the miscellaneous stocks we notice sales of 10 shares of Ontario at $38½.

There have been transactions in Modoc amounting to 400 shares, at $1.35.

Tip Top records 950 shares, at $1.25@$1.10.

The better class of stocks of the regular list of the Mining Exchange show a fair business.

Findley records sales of but 600 shares, at 52c.

Hukill closes weak, with a total of 625 shares for the week, at $3.90@$3.55.

Leadville has been quite active, the sales aggregating 11,125 shares, at $3.85@$3.45. This company has not announced its regular dividend yet, owing to the failures to receive full accounts from the mines of last month's expenditures. The production, however, would seem to warrant the payment of the dividend.

Moose has been very quiet, although somewhat stronger, the sales amounting to 700 shares, at $2.90@$3.15.

In New York & Colorado there have been dealings amounting to 1000 shares, at $1.90@$1.95.

Plumas has been exceedingly quiet, the sales amounting to but 300 shares, at $3.20@$3.25.

Cleveland has been fairly active, with sales of 3100 shares, at $3.35@$3.45.

The fancies have received liberal attention. American Flag records 4600 shares, at 20@22c.

The dealings in Buckeye amount to 15,300 shares, at 46@54c.

Dahlonega records 19,600 shares, at 24@28c.

Gold Placer, with sales of 3800 shares, has ranged between 16 and 19c.

The dealings in Luzerne amount to 19,300 shares, at 20@22c.

Lacrosse has been very quiet, the sales amounting to but 1020 shares, at 21@22c.

Trio records 500 shares, at 65c.

Bertha & Edith records 27,650 shares, at 30@36c.

Mariposa Preferred records but 15 shares, at $6.

200 shares of Quicksilver Common sold at $15½.

The *Tribune* published last Saturday a review of the mining situation, and appeared to discredit the statement that 60,000 shares of Standard stock had been sold in this market. From such investigations as we have made, having been offered special facilities for examining into the matter, we can not but believe that the statement is correct. As a matter of good faith in some recent statements made by Mr. Wm. M. Lent, he offers to pay all the expenses to, from, and while at Bodie, of any man the *Herald*, *Tribune*, *World*, or *Times* may select to examine the Bodie mines, and will offer such correspondent every facility for arriving at the true condition of affairs, provided those papers will publish whatever said correspondent may write.

The Quicksilver Mining Company will pay $263,000 of its mortgage bonds, being the last of its bonded debt of $1,500,000. This payment will leave the company entirely free of debt.

The following is the official letter from the superintendent of the Standard mine, and bears date June 22d:

"The north drift from east cross-cut, 385-foot level, has not been run since last report, owing to timbering. The ledge is so wide, we are compelled to put in square sets of timbers. The upraise from this drift is up a distance of 171 feet—progress for the week, 18 feet; the ledge is 6½ feet wide, of good ore. In the stopes the ledge is 5½ feet wide, of good ore. East cross-cut, 700-foot level, has been run during the past week 17 feet; total length, 87 feet. The ground is good blasting porphyry, with considerable water coming in the face, which would indicate that the ledge is not far distant. West cross-cut (south drift, 450-foot level) has been advanced during the week 15 feet; total length, 43 feet. The ground works very well. The south drift on Gildea ledge is in 188 feet; the ledge is 2½ feet wide and looks well. West cross-cut, 550-foot level, to cut the ledge at the main shaft, is now in 156 feet, in good working ground. Expect to cut the ledge soon. There is no change of any importance in the stopes, which are all looking well. In the West Standard, the ledge is 12 feet wide, of rich ore In the Gildea stopes the ledge is 4½ feet wide, of good ore. The ledge in the stopes, south drift, 300-foot level, is 3½ feet wide, of good ore; and in south drift stopes, on 550-foot level, the ledge is 7 feet wide and looks well. The mill is running steadily, and the mine throughout is looking finely. The work of excavating for pumping machinery is finished, and the mason work of foundation is being done."

SAN FRANCISCO MINING STOCK QUOTATIONS.
Daily Range of Prices for the Week.

NAME OF COMPANY	CLOSING QUOTATIONS. June 27.	June 28.	June 30.	July 1.	July 2.	July 3.	Opening. July 4.
Alpha	24	26	25	24	26	.....	.....
Alta	6¾	7¼	9⅛	9⅛	11½	.....	.....
Argenta	.....	.....	.....	.....	.....	.....	.....
Bechtel	.....	.....	*1½	*1½	2¼	.....	.....
Belcher	6⅛	6	6	6¼	6½	.....	.....
Belle Isle	.....	.....	.....	.....	.....	.....	.....
Benton	.....	.....	.....	.....	.....	.....	.....
Best & Bel	17⅝	18⅞	18¾	18½	19	.....	.....
BlackHawk	.....	.....	.....	.....	.....	.....	.....
Bodie	23	24	22½	22½	23½	.....	.....
Booker	.....	.....	.....	.....	.....	.....	.....
Bullion	7⅞	8	8	7⅞	7⅞	.....	.....
Bulwer	.....	.....	*9	*9	*9	.....	.....
Caledonia	.....	.....	*3	*3	*3	.....	.....
California	5½	5⅝	5½	5⅝	5	.....	.....
Chollar	7⅝	8⅝	8¼	8½	8	.....	.....
Confidence	.....	.....	.....	.....	.....	.....	.....
Con. Imp	1¾	1⅞	1¾	1¾	1¾	.....	.....
Con.Pacific	7	7	7½	7⅞	7¾	.....	.....
Con.Va	5⅜	5½	5⅝	5⅜	5¼	.....	.....
Crown P'int	4¾	4⅝	4⅝	4½	4⅝	.....	.....
Endowm'nt	.....	.....	.....	.....	.....	.....	.....
Eureka Con	.....	16½	17	17	16¼	.....	.....
Exchequer	7⅞	8	8	7¾	7½	.....	.....
Goodshaw	.....	.....	.....	.....	.....	.....	.....
Gould &Cur	11¾	12⅜	12½	12⅛	12½	.....	.....
Grand Prize	4	4	4	3½	4	.....	.....
Hale & Nor.	16	18	17¼	16¼	17¼	.....	.....
Hamburg	.....	.....	.....	.....	.....	.....	.....
Homestake	.....	.....	.....	.....	.....	.....	.....
Hussey	.....	.....	.....	.....	.....	.....	.....
Indep'd'nce	2¼	2½	2½	2⅛	2½	.....	.....
Jackson	.....	.....	.....	.....	.....	.....	.....
Julia Con	4	4¼	4⅜	4½	4⅜	.....	.....
Justice	4	4⅛	4⅝	4⅛	5	.....	.....
Kentuck	.....	.....	.....	.....	.....	.....	.....
Kossuth	.....	.....	.....	.....	.....	.....	.....
Leopard	.....	.....	.....	.....	.....	.....	.....
Leviathan	¾	¾	11-16	¾	¾	.....	.....
Manhattan	.....	.....	.....	.....	.....	.....	.....
Mar. White	6½	7	6¼	6	6	.....	.....
McClinton	.....	.....	.....	.....	.....	.....	.....
MeadowVal	.....	.....	.....	.....	.....	.....	.....
Mexican	26½	27¾	27¾	26½	27	.....	.....
Mono	10	11⅝	11¾	11	11⅛	.....	.....
Navajo	.....	.....	.....	.....	.....	.....	.....
North. Belle	.....	5¾	5¾	.....	5	.....	.....
Ophir	30½	31½	31	30¾	30½	.....	.....
Orig. K'ys'e	.....	.....	.....	.....	.....	.....	.....
Overman	10¾	10¾	11	11	11	.....	.....
P. Sheridan	.....	.....	.....	.....	.....	.....	.....
Potosi	5⅝	5⅞	6	5¾	5½	.....	.....
Ray. & Ely.	4	4	4	4	4¼	.....	.....
Richter	.....	.....	.....	.....	.....	.....	.....
Savage	15	17	16½	15¼	15¾	.....	.....
Scorpion	.....	.....	.....	.....	.....	.....	.....
Seg.Belcher	.....	.....	*28	*28	*28	.....	.....
Sierra Nev.	45	46½	46¼	44¾	43¼	.....	.....
Silver Hill	.....	.....	*2¼	*2¼	*2	.....	.....
Silver King	.....	.....	.....	.....	.....	.....	.....
Standard	.....	.....	*31	*31	*31	.....	.....
Summit	.....	.....	.....	.....	.....	.....	.....
Tioga	.....	.....	*7¾	*7¾	7¾	.....	.....
Tip Top	.....	.....	*1¼	*1½	*1½	.....	.....
Union Con.	43½	44½	45½	40	40¼	.....	.....
Utah	.....	.....	*23	23	*23	.....	.....
Ward	.....	.....	.....	.....	.....	.....	.....
WashoeCon	.....	.....	.....	.....	.....	.....	.....
Yel. Jacket	16⅞	17⅜	17⅜	17⅜	17⅜	.....	.....

* Opening.

REVIEW OF THE SAN FRANCISCO MARKET.

The San Francisco list still continues depressed, and while the quotations closed yesterday at, in the majority of instances, a slight improvement on the general course of the market for the week, yet the tendency is any thing but buoyant. Now that the practicability of the Sutro Tunnel is assured, its benefits upon the mines of the Comstock should certainly be reflected in some degree in the quotations; but instead, we have a dull, uncertain market. The principal reason assigned for this is the non-appearance of the bonanza in Union Consolidated, where it was expected; but at this distance, and with the experiences of past Comstock manipulations before us, no reliable judgment upon the situation can be formed.

The south drift on the 460 level of the Addenda mine has not yet been ascertained as to its extent and character. Silver greatly predominates in the ore. The stock shows considerable activity in San Francisco, at improved prices, sales having been made at 50c.@$1 per share, the higher price representing the latest quotation.

In the Argenta, an upraise is being run on the 150 level. In the Grand Prize, near the line, at a distance of 45 feet, a 3-foot chloride vein of ore is encountered. It is anticipated they will soon have their machinery in order for hoisting. The stock was well maintained in San Francisco, and considerable activity noted.

Drifts are being extended south on the ledge in both the 300 and 400 levels of the Bechtel mine toward the Standard. Late transactions have been made at $1.70@$1.50 per share, which is a slight decline from previous prices.

The stock of the Atlantic Consolidated Company has been selling at 30 to 50 cents per share.

The ore taken from the Belle Isle mine is being crushed at the Grand Prize mill; 10 stamps are running on sulphuret and 10 on chloride; ore assays fairly; outlook seems to be quite promising. On the 23d of June, there were $22,000 shipped. This stock shows increased activity at improved prices.

The 300-foot level of the Belmont mine is now connected with the north end. This will facilitate the working of ore-bodies in that mine. The ore is looking very well between the 300 and 400 levels. Stock shows limited dealings in San Francisco at quite a decline from recent quotations.

In the upraise above the 200-foot level of the Great Western ledge in the Belvidere mine, promising ore is encountered. It is proposed to sink a new shaft in this mine further south. The stock is selling at $1.50@$1.75 per share.

The east cross-cut on the 320 level of the Black Hawk mine is 102 feet in length. This stock has been moderately active in San Francisco, at fairly-maintained quotations.

On the 1350 level of the Alta mine, the cross-cut is in 52 feet in promising ground. This stock closed yesterday at an advance from previous quotations.

The Alpha-Imperial joint winze is advancing favorably. It is now down 360 feet on the level below. The 424 level is in a formation of quartz and porphyry. The stock shows a decline of $1 per share compared with the price in our last.

Belcher closed yesterday at the best price for the week, but a decline of 50c. per share from our last. The south drift, 560 level, is in a mixture of quartz and porphyry.

The Osbiston shaft is down to the depth of 636 feet. The joint cross-cut on the 1700 level of the Best & Belcher has attained a length of 960 feet, and is being pushed toward a perpendicular line of this shaft. This stock closed yesterday at 19c. per share, which is an advance from last week's quotations.

The double winze of the Bullion mine on the 2150 level is making good progress. This winze will be carried on the 420 level of the Con. Imperial.

Bulwer is steady at $9 per share, which is somewhat of a decline. Drifting north on the Stonewall ledge is progressing satisfactorily.

Caledonian is steady at $3 per share. This mine is troubled with water, which interferes with the sinking of a winze below the 1600 level. Little progress is being made in consequence.

Bodie closed yesterday at a considerable improvement. The new stock is quoted at $23.50 per share, equal to $47 on the old basis. It is said that the ore-bodies of this mine are widening as they go further,

and the most sanguine opinions are published as to its outlook and promise.

Chollar has fairly maintained its prices, closing at $8 per share. There is nothing of especial interest in the mine.

Con. Imperial has been very steady during the week, with a single exception. Sales were made at $1.75 per share, which is a slight decline from quotations of last week. The north drift of the 2600 level of this mine is going forward at the rate of 6 feet per day on a wall-vein.

Consolidated Pacific closed at 7¾, an advance on the quotations of a week ago. New hoisting works, purchased in this city, have been ordered for this mine. The winze on Pacific ledge No. 1, on the 160 level, is down 72 feet; vein, 5 feet wide, of high-grade ore.

Crown Point is very steady. Nothing of especial interest in the mine. When the Joint Imperial and Alpha winze has reached the 2600 level, the connection is made with the Crown Point mine, and prospecting will be commenced again.

The old Bonanzas do not improve any. California is somewhat lower, while Consolidated Virginia is fairly maintained. These mines are producing 1000 tons of ore each per week. Active work is going forward in all parts, with nothing new of special interest to note.

Eureka Consolidated closed at $16.50 per share, same price as noted a week ago. Considerable interest is centered in the 1400 level of this mine. The result of cross-cutting, which is now in 14 feet, is awaited with considerable anxiety. It is said that the formation at this point looks very favorable.

The stock of the Dudley Mining Company has been very active in San Francisco at $1.40 to $2.50 per share, later sales representing the higher quotation. It is said that a very important strike has been made below the Aurora tunnel. Active work is going forward. Main shaft is down 354 feet, which will be continued to 600 feet.

Exchequer shows a slight decline. North drift on the 2400 level is 525 feet long, with improvement in ground as progress is being made.

The Fourth of July Mining Co. is making shipments of ore to the Richmond furnaces. This stock has been active at lessened prices in San Francisco.

Gould & Curry shows a decline of $1 per share. There is nothing of special interest to note. This mine is making satisfactory progress.

Hale & Norcross is strong, closing at $17.25 per share, against $16 last week. This mine has a fine vein of ore, and is making satisfactory progress.

The Hamburg mine shows considerable improvement. This stock has been very active in San Francisco at improved prices.

Hillside has been dealt in at $2@$1.50 per share, quite a decline from last week's quotation.

Hussey shows limited dealings in San Francisco, at 5@10c. per share. Cross-cut and drifts on 400 and 500 levels are looking well.

The Independence mine looks well. Vein, 1½ feet in width. The company is making satisfactory shipments. Stock closed at $2½ per share, quite a decline from last week's quotations.

The Jackson mine looks favorably. Stock closed at $5⅛@$5½. Work steadily progressing.

Julia closed at $4⅜@$4. Nothing of special interest to note.

Justice closed yesterday at $5 per share, which is quite an advance on last week's quotation. The mine looks very well. Work is progressing rapidly. Every thing in a favorable condition. A winze is sunk in the ledge, and has followed a three-foot vein of rich ore which was discovered on the 800 level. As soon as the connection is completed, a drift will be run along the vein and the ore encountered extracted and milled. The ore is worth from $150 to $200 a ton, two thirds of the yield being gold. This part of the mine is almost unexplored, and the indications seem to point to the presence of a valuable ore-deposit in the vicinity.

Manhattan closed at $2.50@$2.75 per share—same price quoted last week. This company is reducing 118 tons of ore per week, valued at about $200 per ton.

In the remarks upon the Maryland Consolidated in our issue of June 28th we noted that the stock was selling in San Francisco at 45@60c. per share. This referred to the Maryland Consolidated of the Comstock, and not to the mine of the same name in the Bodie District to which we now refer. It is stated that this stock has a market value of $2½ per share. Energetic work is going forward, and the mine generally looks favorably.

The stock of the Martin White Company is lower, showing a decline of $1 per share from the price reported in our last issue. We have nothing of especial interest to report.

The Mono mine, of the Bodie District, is in a promising condition. On the 400 level, the indications are very favorable. New hoisting works have just been completed at the mine, and the best of progress is being made throughout. Stock closed at $11⅛, which is a decline on previous quotations.

In the Noonday mine, the north drift, 200 level, is in 250 feet. Ledge is 3 feet wide, good milling ore; assays about $8 per ton.

Mexican and Ophir are fairly maintained.

Overman has nothing of interest to report.

The stock of the Orient Mining Co., a Bodie mine, shows unusual activity in the San Francisco market, at 20@75c. per share.

The Raymond & Ely shows a slight improvement. Every thing looks well in this mine.

Savage shows a decline of $2 per share.

Seg. Belcher very steady.

Sierra Nevada is down $2 per share. This mine is beginning to assume some permanence as a bullion producer.

Tioga shows some improvement. West cross-cut on 520 level is improving. Quartz and stringers assay well, and carry a large proportion of gold.

Union Consolidated shows a decline of $6.50 per share from the price obtained a week ago. The aggregate decline of this company's stock since June 6th amounts to over $5,000,000. It seems to be the impression now that the anticipated bonanza in this mine existed only in the imagination of San Francisco "bull" speculators.

The stock of the Utah Mining Company is well maintained. No particular change in the mine is noted.

Yellow Jacket has been steady this week, and closed yesterday at an improved price. The shaft of this company has reached a depth of 2620 feet. Active work is going forward. They have sent a diamond drill down to search for water.

The McCrackin Consolidated Mining Company, of Arizona, has declared a stock dividend of $2.67 per share, payable immediately.

The George Douglas Mining Company has declared a stock dividend of 44 per cent.

ASSESSMENTS, with dates when delinquent:

Leo, 50c., July 18th; Union Con., $2, July 7th; Sierra Nevada, $3, July 16th; Alta, $1, July 17th; Mono, 50c., July 28th; Hartford, 50c., July 21st; Ida, 25c., July 21st; Ward Mining Company, 50c.; North Noonday, 25c., July 7th; Dudley, 25c., July 13th; Tioga Con., 25c., July 17th.

The *Commercial Herald* of the 27th ult. says of the market:

"The mining stock market has been exceedingly variable during the past week, showing a sharp speculative movement, both for the small profits obtained and in order to gain control of several of the prominent mines. Sharp games are inaugurated just now to bring the market up or send it down in very short order, so that mining matters stand upon a very unreliable basis, though the evidences are favorable toward better rates under the supposition that the 'drain' will reveal prospects of ore-finds before long; and when the market is in this condition, these prospects are often discounted in advance; for the heavy holders are nearly always certain of knowing many days in advance what will be the outcome of the developments. It will have to be a very active market for small holders to make any very considerable amount out of their investments. It is utterly impossible for them to know the movements of the controlling parties, so that it is mere chance that they will gain any thing. There is a falling off in the volume of business, though not in the placement of wild-cat shares. The boards will adjourn from Friday next until the following Monday. We have nothing of particular interest to note of the mines, except that the *Bulletin*, out of its usual way, gives a long and favorable dispatch concerning the ore-body in the Standard, Bodie, and Mono claims."

Coal Stocks.

NEW YORK, Thursday Evening, July 3, 1879.

The dealings in this market have been very small and prices weak all around. The sales have been as follows: Delaware & Hudson Canal, 3652 shares, at $48⅛@$46½; Delaware, Lackawanna & Western, 44,750 shares, at 58⅝@57½; New Jersey Central, 18,835 shares, at 52½@51⅛; Pennsylvania Coal Company, 10 shares, at 152.

The Philadelphia market has also been quiet, although prices have been stronger than here. The sales have been as follows: Lehigh Coal and Navigation, 541 shares, at $25@$24½; Lehigh Valley Railroad, 833 shares, at $40¼@$41; Pennsylvania Railroad, 24,045 shares, at $38½@$39¾; Reading, 10,541 shares, at $19⅝@$20.

The amount payable in this city in dividends and interest during July is about as follows: Interest on government stocks, $15,000,000; bank dividends, $1,500,000; railroad dividends, $10,000,000; interest on railroad bonds, $5,000,000; total, $31,500,000. In Boston the account stands about as follows: Interest on bonds, $6,559,900; manufacturing dividends, $722,500; railroad dividends, $1,383,270; miscellaneous, $801,164; total July 1st, 1879, $9,466,844; total January 1st, 1879, $9,310,222; total July 1st, 1878, $9,931,102; total January 1st, 1878, $10,151,762.

Modification of the Nesquehoning Lease to the Lehigh Coal and Navigation Co.—The Philadelphia *Ledger* says: "An agreement between the Nesquehoning Valley Railroad Company and the Lehigh Coal and Navigation Company was executed yesterday, modifying the terms of the lease of the railroad of the first-named company. The road in question extends a distance of sixteen miles from a point on the railroad of the Lehigh Coal and Navigation Company, a mile above Mauch Chunk, to the junction of the Catawissa and Little Schuylkill railroads, both leased by the Reading Railroad Company. A branch from a point midway on the road, with a tunnel three quarters of a mile long, connects with the mines of the Lehigh Navigation Company, and by means of the Panther Creek lines of that company connects again with the roads of the Reading Company at Tamaqua. The leased road forms a valuable connecting link in the route of the Lehigh Coal and Navigation Company, and is, indeed, essentially a part of their main line of railroad. During the first five months of this year, there were transported over it 503,000 tons of coal from the Beaver Meadow region and the Lehigh Company's mines, besides the regular passenger and general freight traffic. The original lease was made in 1868 for 999 years, at a rental which paid ten per cent per annum to the stockholders; but the lessee reserved the right to terminate the lease, by merger or otherwise, at any time after ten years, which term expired in November last. The contract just executed provides that the lessees shall suspend for five years from September 1st next the exercise of their right to terminate the lease, and assures to the stockholders dividends at the rate of seven per cent per annum, which rate is relatively as liberal as ten per cent was when the lease was first made. The terms seem to be mutually advantageous, and will, it is believed, be generally accepted by the Nesquehoning Valley stockholders; but if any stockholder should be dissatisfied, the Lehigh Navigation Company has agreed to provide a purchaser for his stock at par. There is no debt on the road, and the total amount of stock is $1,300,000. The saving to the Lehigh Navigation Company is $39,000 per annum and the tax thereon.

The New Outlet of the Lehigh Valley Railroad.—The New York *Daily Bulletin* says of this: "The Lehigh Valley and the Pennsylvania Railroad companies are planning a heavy reprisal upon the Reading, in advance of any losses through the recent lease of the North Pennsylvania Railroad by the latter. One of the Lehigh Valley directors is credited with the expression that President Gowen was willing to do any thing that they wished and to do their business at very low rates, but they could not work with him without antagonizing the Pennsylvania and putting themselves completely in his power; then when they wished to return to the Pennsylvania, it would be too late. The Pennsylvania, on the other hand, found itself in danger of losing all the New York traffic that came from the Germantown & Norristown branch of the Reading Railroad, and was delivered to it at Germantown. This amounted to a great deal; for a number of passengers left the lower part of the city, as well as Germantown and Chestnut Hill by the Reading, and took the Pennsylvania line at the Junction. The new cut-off which the Reading is now laying as fast as it can, from Wayne Station on its Germantown Branch to Tabor Station, on the North Pennsylvania, would not only take away all that traffic, but break up the connection, so that passengers would be virtually compelled to take the new line. Therefore the Pennsylvania has the deepest interest in the new line, which would give at least $100,000 a year traffic to its main line in New York. It would also divide the enormous local traffic from Germantown to the city, which pays about 13 per cent on the capital of the Germantown & Norristown road. It would leave the connecting road about two miles out from the passenger station, at Thirty-second and Market streets, and go west of the Reading, through a part of Germantown, so that it would naturally get about one half of the traffic from that populous ward. It would run then almost direct to Bethlehem, through a fertile farming country, with the North Penn and the Perkiomen Branch about five miles distant on either side of it. With this the Lehigh Valley would be able to jump at once into prominence as a leading factor in a trunk line. Instead of terminating at Bethlehem, with an out'et to this city by permission of the North Pennsylvania, with its insufficient terminal facilities, it would have a line of its own to the Pennsylvania Station in this city, with free access to its vast shipping wharves and elevators, with the right to run its own engines from Buffalo over the Erie, from Lyons on the main line of the Central, and from Fairhaven on Lake Ontario, direct to tide-water in this city. Such a line would cost from three and a half to four millions, and would easily earn the interest on the investment by its vast local traffic, cheapness of operation, and economy of construction; for its bonds could be sold at five per cent, with the joint indorsement of the Lehigh Valley and the Pennsylvania railroad companies. Nothing has yet been done, but a survey will be made very soon."

Philadelphia & Reading Railroad Operations for First Half of 1878 and 1879.—The statement of the Reading Railroad Company for the past half-year is summed up in totals as follows, compared with the corresponding period the preceding year:

TONNAGE AND PASSENGERS.

	1879.	1878.
Tons of coal on RR	3,489,004·02	2,204,007·08
Tons mdse. on RR	1,852,261·10	1,572,072·05
Passengers on RR	3,143,956·00	2,978,331·00
Tons coal in colliers	291,474·00	267,606·00
Tons of coal mined:		
By Coal and Iron Co	1,797,298·00	1,043,810·02
By tenants	556,214·07	398,532·11
Total from company lands and from leasehold estates	2,353,512·07	1,442,342·14

The grand total of the gross receipts for the first half of the year amounts to $10,418,010.68, against $8,437,464.47 for the same period in 1878.

The recent narrowing of the gauge of the St. Louis & Iron Mountain Railroad is said to have been done in the interest of the Pennsylvania Railroad Company, in order to secure business for its Pittsburg, Cincinnati & St. Louis lines.

A dividend of $1.50 per share on the stock of the *Ea*

GENERAL MINING STOCKS.

Dividend Paying Mines.

NAME AND LOCATION OF COMPANY.		Feet on Vein.	Capital Stock.	SHARES. No.	Par Val	ASSESSMENTS. Total levied to date.	Date and amount per share of last.			DIVIDENDS. Total paid to date.	Last Dividend.			Rate p. An	HIGHEST AND LOWEST PRICES PER SHARE AT WHICH SALES WERE MADE. June 28. H.	L.	June 30. H.	L.	July 1. H.	L.	July 2. H.	L.	July 3. H.	L.	July 4. H.	L.	SALES.
Alps	Nev.	800		30,000		204,000	Aug.	1878	$1 00	37,500	Apr.	1876	$0 05		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Belcher, G. S.	Nev.	1,040	10,400,000	104,000	100	1,500,200	May.	1879	1 00	15,397,200	Apr.	1876	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bobtail, G	Col.	2,500	1,136,630	227,326	5	*				90,930	Nov.	1878	15		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bobtail Tunnel, G	Col.	.....	100,000	20,000	5	52,000	July	1873	0 30	56,000	Dec.	1878	40		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bodie, G	Cal.	.....	5,000,000	50,000	100	75,000	May.	1879	1 00	800,000	Jan.	1879	1 00		47	..	47	50	48	..	..	..	..	..	..	..	..	220
California, G. S.	Nev.	600	54,000,000	540,000	100					30,510,000	May.	1879	50		5⅝	5½	5⅞	5½	5¾	5⅝	5¾	5½	5½	5¼	..	..	2,281
Calumet & Hecla, C	Mch	.....	2,000,000	80,000	25	1,200,000				14,250,000	May.	1879	5 00		180	..	..	..	..	..	..	..	..	..	..	..	..	..
Central, C	Mch	.....	500,000	20,000	25	100,000	June	1862	0 65	1,340,000	Feb.	1879	4 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chollar, G. S.	Nev.	700	11,100,000	112,000	100	1,750,000	Sept.	1878	5 00	3,040,000	Feb.	1872	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Copper Falls, C	Mch	.....	1,000,000	20,000	50	535,000	May.	1876	.....	100,000	Nov.	1871	1 00		2	..	..	..	..	..	..	..	..	..	..	..	..	..
Cons. Virginia, G. S.	Nev.	710	54,000,000	540,000	100	474,600	June	1873	3 00	41,040,000	May.	1879	50		5½	..	5¾	5⅝	5¾	5½	5¾	5⅝	5½	5¼	..	..	4,835
Confidence, G. S.	Nev.	130	2,496,000	24,960	100	256,320	Apr.	1878	0 50	78,000	May.	1865	8½		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cons. Her. & Roe	Col.	16,500	1,000,000	100,000	10	*									..	..	..	..	..	..	..	..	..	..	..	..	..	..
Crown Point, G. S.	Nev.	600	10,000,000	100,000	100	2,073,370	June	1878	1 00	11,588,000	Jan..	1875	2 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Daney	Nev.	2,000		108,000	.....	91,800	Nov.	1878	0 20	56,000	July	1863	.....		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eureka Cons., G. S. L.	Nev.	.....	5,000,000	50,000	100	100,000	May.	1876	1 00	3,650,000	Apr..	1879	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eureka G. Mg., G	Cal.	1,680	2,000,000	20,000	100					2,149,000	Apr.	1878	0 25		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Findley, G	Geo.	.....	200,000	200,000	1					8,000	May.	1879	1c		..	..	..	..	52c	..	52c	..	52c	..	..	..	600
Franklin, C	Mch	.....	500,000	20,000	25	360,000	June	1876	5 00	585,000	Nov.	1871	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gila	Ariz	.....		100,000	.....	70,000	Jan.	1879	0 25	50,000	Aug.	1875	0 25		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gould &Curry, G. S.	Nev.	612	10,800,000	108,000	100	2,936,000	Mar.	1879	1 00	3,826,800	Oct.	1870	10 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Grand Prize	Nev.	1,500		100,000	.....	100,000	July.	1878	1 00	400,000	Feb.	1878	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hale & Norcross, G. S.	Nev.	400	11,200,000	112,000	100	3,082,000	Mar.	1879	1 00	1,598,000	Apr.	1871	5 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Homestake, G	Dak	.....	10,000,000	100,000	100					180,000	June	1879	30		..	..	..	..	..	..	38¾	38½	37⅝	37	..	..	290
Hukill, G. S.	Col.	3,288	1,000,000	100,000	10	*					Dec.	1878	0 10		..	..	3.90	..	..	..	3.80	..	3.80	3.55	..	..	625
Independence	Nev.	1,500		100,000	.....	75,000	Feb..	1878	15	150,000	Nov.	1878	25		2.45	..	2.65	2.60	2.60	..	2.75	2.70	2.75	..	..	..	1,140
Kentuck, G. S.	Nev.	95	3,000,000	30,000	100	300,000	Aug.	1878	1 00	1,252,000	Mar.	1870	5 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
K. K. Cons	Nev.	.....		50,000	.....	300,000	Jan..	1879	1 00	50,000	Sept.	1873	0 25		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leadville	Col.	.....	2,000,000	.....	.....	*				40,000	May	1879	10		3.60	3.50	3.80	3.45	3.85	3.45	3.85	3.45	3.50	..	..	..	11125
Leeds	Uth	3,000		60,000	.....					78,000	Oct..	1878	0 15		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leopard, L. G. S.	Nev.	1,500	5,000,000	50,000	100	225,000	Mar.	1879	50	162,500	Dec.	1876	0 50		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manhattan	Nev.	.....		50,000	.....	50,000	Oct..	1878	1 00	400,000	Feb.	1877	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Merrimac, S.	Mas.	1,500	500,000	100,000	5	*	June			120,000	Mar.				..	..	..	..	..	..	..	..	..	..	..	..	..	..
Minnesota, C	Mch	.....	1,000,000	20,000	50	436,000		1869	1 00	1,820,000	Mar.	1876	0 50		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Modoc	Cal.	4,000		100,000	.....	450,000	Feb..	1879	0 50	50,000	Dec.	1876	0 50		..	..	..	..	..	..	..	..	1.35	..	..	..	400
Moose	Col.	39,000	2,000,000	200,000	10	*				550,000	Mar.	1878	0 25		2.95	..	2.95	2.90	..	..	3 15	..	..	..	..	..	..	700
National, C	Mch	.....	500,000	20,000	25	195,000	Oct..	1875	1 00	360,000	Oct.	1873	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
N. Y. & Colorado, G	Col.	.....	1,000,000	50,000	20	*				20,000	Mar.	1877	0 20		..	..	..	..	1.95	1.95	1.90	..	1.95	..	..	..	1,000
Northern Belle, S	Nev.	1,600	5,000,000	50,000	100					1,425,000	Feb.	1878	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ontario	Uth.	3,000	10,000,000	100,000	100					2,200,000	June	1879	50		..	..	..	..	38½	..	..	..	..	..	..	..	..	10
Ophir, G. S.	Nev.	675	10,080,000	100,800	100	3,436,800	Nov.	1878	1 00	1,394,400	Mar.	1864	4 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Osceola, C	Mch.	.....	1,000,000	40,000	25	880,000	Mar.	1876	2 00	.....	Nov.	1878	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pewabic, C	Mch.	.....	500,000	20,000	25	185,000	June	1868	3 00	460,000	July	1873	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Potosi, G. S	Nev	700	11,000,000	112,000	100					$					..	..	..	..	..	..	..	..	..	..	..	..	..	..
Phœnix, C	Mch.	.....	1,000,000	20,000	50	817,500	Sept.	1870	3 00	10,000	Dec.	1876	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plumas	Cal.	.....	1,000,000	100,000	10					140,000	June	1879	8		..	..	3.25	3.20	..	..	..	..	3.20	..	..	..	300
Quincy, C	Mch.	.....	200,000	20,000	10					2,230,000	Feb.	1878	5 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raymond & Ely, G. S.	Nev.	5,000	3,000,000	30,000	100	800,000	Apr..	1879	1 00	3,075,000	Sept.	1873	3 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ridge, C	Mch.	.....	500,000	20,000	25	200,000				90,000	Feb.	1875	1 00		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rye Patch	Nev.	1,600		30,000	.....	157,500	Dec..	1878	1 00	105,000	Dec.	1877	0 25		..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Joseph, L	Mo.	2,000 acs.	1,000,000	100,000	10					250,000					..	..	..	..	..	..	..	..	..	..	..	..	..	..
Savage, G. S.	Nev.	800	11,250,000	112,000	100	4,196,500	Feb.	1879	1 00	4,460,000	June	1869	3 00		..	..	..	..	..	..	16	..	..	..	..	..	..	50
Seaton, G. S.	Col.	1,700	500,000	50,000	10	*					May	1877	0 10		.....		..	..	..	..	..	..	..	..	..	..	..	..
Sierra Nevada, G. S.	Nev.	3,650	10,000,000	100,000	100	2,550,000	Apr..	1879	2 00	102,000	Jan.	1871	1 00		.....		..	..	..	..	..	..	..	..	..	..	..	..
Silver Islet	Mch	.....		.....	.....										.....		..	..	..	..	..	..	..	..	..	..	..	..
Silver King	Ariz	1,500	10,000,000	100,000	100					450,000	Nov.	1878	0 50		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Standard	Cal.	.....	10,000,000	100,000	100	50,000	July	1878	1 00	1,100,000	May.	1879	0 50		30½	29¾	31¼	31¼	31½	31¼	..	..	31	29½	..	..	1,360
Yellow Jacket, G. S.	Nev.	1,200	12,000,000	120,000	100	4,032,000	Apr..	1879	1 00	2,184,000	Aug.	1871	2 50		..	..	..	..	..	..	..	..	..	..	..	..	..	..
McClinton	Cal.	1,000		60,000	.....	60,000	May.	1878	0 25	.....					..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..

Non-Dividend Mines

Allouez, C	Mch.	.....	1,000,000	20,000	50	940,000	May	1876	5 00	.....					.....		.....		.....		.....		.....		.....		.....
Alpha, G. S.	Nev.	306	3,000,000	30,000	100	240,000	Mar.	1878	1 00	.....					.....		.....		.....		.....		.....		.....		.....
Alta	Nev.	600		108,000	.....	1,101,000	Feb.	1879	1 00	.....					.....		.....		.....		.....		.....		.....		.....
Am. Flag, G	Col.	5,300	600,000	60,000	10	*				.....					22c	20c	.....		21c		.....		21c	20c	.....		4,600
Andes	Nev.	2,000		100,000	.....	380 000	Ma	1879	0 25	.....					.....		.....		.....		.....		.....		.....		.....
Baltimore Cons	Nev.	1,050		84,000	.....	1,015,000	Apr	1873	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Benton	Nev.	600		108,000	.....	91,800	Dec.	1873	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Bechtel	Cal.	.....		60,000	.....	96,000	Apr..	1879	0 25	.....					2	..	2	..	2.20	2.15	2.15	2.10	..	..	..	..	1,030
May Belle	.....	1,500		100,000	.....					.....					60	..	..	..	70c	..	..	..	70c	65c	..	..	500
Belvidere	Cal.	1,500		60,000	.....	33,000	Feb..	1879	0 20	.....					1.60	..	..	..	..	..	..	..	..	..	..	..	100
Bertha & Edith. G	Vir.	645 acs.	500,000	500,000	10	*				.....					32c	30c	35c	32c	39c	34c	34c	33c	35c	32c	..	..	37,850
Best & Belcher, G. S.	Nev.	545	10,080,000	100,800	100	639,390	Apr..	1879	1 00	.....					.....		.....		.....		.....		.....		.....		.....
Boyle	Nev.	600		108,000	.....	10,240	Aug.	1878	0 15	.....					.....		.....		.....		.....		.....		.....		.....
Buckeye	Col.	.....	2,000,000	400,000	5	*				.....					49c	46c	50c	48c	51c	50c	52c	51c	54c	52c	..	..	15,500
Bullion, G. S.	Nev.	943⅛	10,000,000	100,000	100	3,102,000	May.	1879	1 00	.....					.....		.....		.....		.....		.....		.....		.....
Bulwer	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	10	..	10½	..	..	..	10	..	..	..	260
Cal. B. H	..	..	..	..	..	..	..	..	..	..	..	..	..		4	..	..	..	3¾	3¾	3½	..	3¾	3½	..	..	560
Caledonia, G. S	Nev.	2,188	10,000,000	100,000	100	1,640,000	Apr.	1879	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Cashier	Col.	.....	500,000	250,000	2	*				.....					.....		.....		.....		.....		.....		.....		.....
Challenge	Nev.	90		50,000	.....	10,000	Nov.	1878	0 20	.....					.....		.....		.....		.....		.....		.....		.....
Cleveland, G	Col.	3,715	250,000	25,000	10	*				.....					3.40	..	3.40	..	3.40	..	3.40	3.35	3.45	..	..	..	3,100
Cons. Imperial, G. S	Nev.	468	50,000,000	500,000	100	875,000	Feb.	1879	0 20	.....					1.85	1.75	1.90	1.85	1.90	1.75	1.80	1.60	1.75	1.65	..	..	15,725
Con. N. Slope & E. T.C.	Col.	15,000	500,000	10,000	50	*				.....					.....		.....		.....		.....		.....		.....		.....
Con. Pacific	Cal.	1,400		60,000	.....					.....					7⅛	7¼	7⅛	..	7¾	..	8⅛	8	8	7⅞	..	..	1,965
Dahlonega	Ga.	.....	250,000	250,000	1	*				.....					24c	26c	25c	..	27c	26c	27c	26c	27c	26c	..	..	19,600
Dana, C	Mch.	.....	500,000	20,000	25	68,000	Jan..	1863	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Day	Nev.	1,500		100,000	.....	70,000	Feb..	1879	0 15	.....					.....		.....		.....		.....		.....		.....		.....
Dayton	Nev.	1,600		100,000	.....	750,000	Apr.	1878	0 25	.....					.....		.....		.....		.....		.....		.....		.....
De Frees	Ariz	1,500		100,000	.....	140,000	May.	1879	15	.....					.....		.....		.....		.....		.....		.....		.....
Duncan, S	Ont.	.....	1,200,000	60,000	20	75,000	July	1876	41⅛	.....					.....		.....		.....		.....		.....		.....		.....
Exchequer, G. S	Nev.	400	10,000,000	100,000	100	480,000	Feb..	1879	1 00	.....					.....		.....		.....		.....		.....		.....		.....
Gold Placer, G	Col.	.....	5,000,000	200,000	25					.....					18c	..	..	..	..	..	19c	16c	18c	..	..	..	3,800
Goodshaw	Cal.	.....		100,000	.....	30,000	Apr.	1879	0 10	.....					.....		.....		.....		.....		95c	90c	..	..	300
Granville, G	N. C.	357 acs.	1,000,000	100,000	10	*				.....					22c	..	22c	21c	..	..	22c	20c	..	..	..	..	2,700
Humboldt, C	Mch.	.....	500,000	20,000	25	100,000	Sept	1878	0 15	.....					.....		.....		.....		.....		.....		.....		.....
Hussey	Nev.	4,500		100,000	.....	125,000	May.	1879	0 15	.....					.....		.....		.....		16c	15c	18c	..	..	..	600
International, S	Ont.	.....	1,200,000	60,000	20	*				.....					.....		.....		.....		.....		.....		.....		.....
Julia, G. S	Nev.	3,000	11,000,000	110,000	100	872,500	Jan.	1879	1 25	.....					.....		.....		.....		.....		.....		.....		.....
Justice, G. S	Nev.	2,100	10,500,000	105,000	100	2,808,500	May.	1879	1 00	.....					.....		.....		.....		.....		.....		.....		.....
King's Mountain, G	N. C.	.....	1,200,000	120,000	10	*				.....					.....		.....		.....		.....		.....		.....		.....
Kossuth	Nev.	2,700		108,000	.....	421,200	Aug.	1877	0 15	.....					.....		.....		.....		.....		.....		.....		.....
Lacrosse	Col.	3,900	1,000,000	100,000	10	*				.....					22c	21c	.....		.....		.....		21c	..	..	..	1,020
Leviathan	Nev.	2,000		100,000	.....	265,000	Mar.	1879	25	.....					.....		.....		70c	..	70c	..	.....		.....		400
Luzerne	Col.	4,200	5,000,000	500,000	10	*				.....					22c	21c	22c	21c	21c	20c	21c	20c	21c	20c	..	..	19,300
Madison, C	Mch.	.....	500,000	20,000	25	123,000	Sept	1876	0 10	.....					.....		.....		.....		.....		.....		.....		.....
Mariposa preferred	Cal.	44,387	5,000,000	50,000	100	1,425,000	June	1877	1 00	.....					.....		.....		6	..	.....		.....		.....		215
" common	Cal.	acres.	10,000,000	100,000	100	1,425,000	June	1878	1 00	.....					.....		.....		.....		.....		.....		.....		.....
McCracken	Ariz	4,500		100,000	.....	100,000	Oct	1878	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Martin White	Nev.	.....		100,000	.....	650,000	Dec.	1878	1 50	.....					.....		.....		.....		.....		.....		.....		.....
Mexican, G. S	Nev.	600	10,080,000	100,800	100	318,300	May.	1879	1 00	.....					.....		.....		.....		.....		.....		.....		.....
Minnietta Belle	Cal.	1,500		100,000	.....	75,000	Apr.	1878	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Mono	Cal.	750		50,000	.....	70,000	Mch.	1879	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Mt. Bross Tunnel	Col.	8,600	2,000,000	200,000	10	*		1878		.....					.....		.....		.....		.....		.....		.....		.....
Navajo	Nev.	1,500		100,000	.....	145,000	Feb..	1879	0 20	.....					50c	..	50c	..	.....		.....		40c	..	..	..	500
New York	Nev.	1,000		100,000	.....	800,000	Feb..	1879	0 40	.....					.....		.....		.....		.....		.....		.....		.....
Orig. Keystone	Nev.	1,500	1,000,000	100,000	10	100,000	Apr.	1879	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Overman, G. S	Nev.	1,200	3,840,000	38,400	100	3,414,280	Jan.	1879	3 00	.....					.....		.....		.....		.....		.....		.....		.....
Petherick, C	Mch.	.....	500,000	20,000	100	165,533	Mar.	1876	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Pleasant View, G	Col.	1,200	200,000	20,000	10	*				.....					.....		.....		.....		.....		.....		.....		.....
Quicksilver preferred	Cal.	8,500	4,291,300	42,913	100	*				.....					.....		.....		.....		.....		.....		.....		.....
" common	Cal.	acres.	5,708,700	57,087	100	*				.....					.....		.....		.....		.....		.....		.....		.....
Seg. Belcher, G. S	Nev.	160	640,000	6,400	100	244,800	Apr.	1874	1 00	.....					.....		.....		15½	..	.....		.....		.....		200
Silver Hill, G. S	Nev.	5,400	10,800,000	108,000	100	1,404,000	Apr.	1879	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Silver Prize	Nev.	1,500		100,000	.....	65,000	Feb	1879	0 25	.....					.....		.....		.....		.....		.....		.....		.....
Star, C	Mch.	.....	500,000	20,000	25	265,000	Mar	1876	0 50	.....					.....		.....		.....		.....		.....		.....		.....
Superior, C	Mch.	.....	500,000	20,000	25	340,000	Mar	1878	0 25	.....					.....		.....		.....		.....		.....		.....		.....
Sutro Tunnel	Nev.	.....	20,000,000	2,000,000	10				0 50	.....					4½	4¼	4½	..	4⅜	4⅛	4⅜	4⅜	4⅛	4¼	..	..	10,421
Tiptop	Ariz	.....		100,000	.....	120,000	July	1878	.....	.....					1.25	..	1.25	..	1.20	1.15	1.15	..	1.10	..	..	..	920
Tioga	Cal.	1,500		100,000	.....	80,000	Apr.	1879	0 20	.....					6¾	..	7	6¾	7½	..	8	7½	7½	..	..	..	705
Trio	Col.	1,250	150,000	150,000	1					.....					..	..	..	..	65c	..	..	..	..	..	..	..	500
Trojan	Nev.	1,500		100,000	.....	265,000	Apr.	1879	0 25	.....					.....		.....		.....		.....		.....		.....		.....
Tuscarora	Nev.	.....		100,000	.....	25,000	mar.	1879	0 05	.....					13c	12c	14c	..	15c	..	.....		15c	..	..	..	10,100
Union Cons. G. S	Nev	.....	10,000,000	100,000	100	665,000	Jun.	1879	2 00	.....					.....		.....		.....		.....		.....		.....		.....
Utah	Nev	1,000		20,000	.....	830,000	Apr.	1879	2 50	.....					.....		.....		.....		.....		.....		.....		.....
Ward	Nev	1,200		110,000	.....	99,000	Jan.	1879	0 30	.....					.....		.....		.....		.....		.....		.....		.....
Wells Fargo	Nev	1,500		108,000	.....	243,000	Apr.	1879	0 50	.....					.....		.....		.....		.....		.....		.....		.....

G. Gold. S. Silver. L. Lead. C. Copper. * Non-Assessable.

Total Assessment levied to date..... ... $66,663,413 Total Dividends paid to date..... ... $155,318,83 Total Shares sold duringthe week..... 239,842

COAL STOCKS.

NAME OF COMPANY.	Capital Stock.	SHARES. No.	SHARES. Par Val.	Last Dividend.			Rate per Ann.	Quotations of New York stocks are based on the equivalent of $100. Philadelphia prices are quoted, so much per share. June 28. H.	June 28. L.	June 30. H.	June 30. L.	July 1. H.	July 1. L.	July 2. H.	July 2. L.	July 3. H.	July 3. L.	July 4. H.	July 4. L.	SALES.
	$		$	Mo.	Y.	A't.	Per c'nt													
Central Coal.	10,250,000	102,500	100	Jan.	77	2½	....													
De., L. & W. R.R.	20,000,000	200,000	100	Aug	76	4	9	48	47¾	48⅛	47⅝	47⅛	47⅝	47¾	46⅝	47⅛	46⅛	.....	.....	3,652
D., L. & W. R.R.	26,200,000	524,000	50	July	76	2½	5	58⅜	58	58⅝	59⅛	58⅜	58¼	58¼	57⅛	58	57⅜	.....	.....	44,756
Lehigh C. & N.	10,148,356	208,971	50	Nov	76	1¾	5½	24⅛	24¼	25	24⅞	25	24⅜	24⅜	24⅛	24⅞	24⅜	.....	.....	541
Leh. Val. R. R.	27,228,855	540,858	50	J'ne	79	1	4	40¼	40⅛	40⅜	40¼	41	40¾	41	40⅞	41⅛	41	.....	.....	833
Maryl'd Coal	4,400,000	44,000	100	Jan.	76	1½	1½													
N. J. C. & R. R.	20,600,000	206,000	100	Apr	76	2½	2½	52¼	52	52⅜	52⅜	52½	51⅜	52⅛	51⅝	51¾	51¾	.....	.....	18,895
Penn. Coal...	5,000,000	100,000	50	May	78	3	....									152				10
Penn. R. R...	68,870,200	1,337,404	50	May	79	2	8	38⅞	38⅛	39⅛	39⅛	39⅛	39⅛	39⅜	39¼	39¼	39⅜	.....	.....	24,045
Ph. & R. R. R.	34,278,175	685,563	50	Jan	76	4¾	10	19⅜	19⅜	20	19⅜	20	19¾	20	19¾	19⅞	19⅜	.....	.....	10,511

The Delaware and Hudson Canal Co. has paid in dividends to date $38,821,104, and the Philadelphia and Reading $42,012,497
Total Sales.....103,207.

Pennsylvania RR. Co. will be paid by the Philadelphia & Reading RR. Co.

New Ohio Coal Railway.—The contract for the grading, masonry, etc., of the coal road from Musselman's Mills to Chillicothe, O., ten miles, has been awarded.

Lehigh Valley Branch to Philadelphia.—The *Railway World* of June 28th says: "It was rumored last week that the Lehigh Valley Railway Company had under consideration a project for constructing a railroad from some point on its line between Bethlehem and Allentown to some point on the New York division of the Pennsylvania Railroad, which would afford convenient entrance into this city. Mr. Hartshorne, Acting President of the Lehigh Valley, is reported as saying that 'this project has been before the directors of our company for some time. The extension is not the result of any conflict for traffic with any other road, but it is a natural outgrowth, demanded by our business. Even though the measure seems to meet with favor, still it is not an established fact, as no move has been made to begin the work. The route was substantially as stated, and if the thing was consummated it would no doubt prove of benefit to the line.' The estimated cost of the line is $2,500,000."

The *East Mahanoy RR. Co.* has declared a dividend of $1.50 per share, payable on and after July 15th.

COMPANY MEETINGS.

The following companies will hold meetings on the dates set opposite their names:

Eagle Silver Manufacturing and Mining Co.....July 7
Utah Silver Mining Co..... " 8
Sherwood Consolidated Mining Co..... " 8
Curtis Consolidated Mining Co ..... " 8
Union Consolidated Mining Co..... " 21

Coupons and interest on the bonds of the following companies fall due and are payable during the present month:

RAILROAD AND MISELLANEOUS COMPANIES.

Alabama & Susquehanna RR., 1st mortgage. Interest due.
Albermarle & Chesapeake Canal Co. Coupons.
Alleghany Valley RR. Interest.
Alleghany Valley. Coupons.
Am. Dock and Improvement Co. Coupons due.
Atchison, Topeka & Santa Fe RR. Co. Coupons.
Bell's Gap RR. Co. Coupons.
Bigelow Blue-Stone Co. Coupons.
Boston, Hartford & Erie RR. Coupons.
Central RR. of N. J. Interest.
Chesapeake & Delaware Canal Co. Interest.
Chesapeake & Ohio Canal Co. Coupons.
Crown Point Iron Co. Coupons.
Cumberland & Penn. RR. Coupons.
Delaware Division Canal. Coupons.
Farmingdale & Squan RR. Coupons.
Grand Tower Mg., Mfg. and, Trans. Co. Interest due.
Ithaca & Athens RR. Coupons due.
Lackawanna & Bloomsburg RR. Coupons.
Mahanoy & Broad Top RR. Coupons due.
Milwaukee Iron Company. Coupons due.
Monongahela Navigation Company. Coupons.
Morris & Essex RR. Interest.
Morris & Essex RR. Coupons.
Newark & N. Y. RR. Coupons.
North Penn. RR. Interest.
Penn. RR. Coupons.
Penn. Canal Company. Coupons.
Philadelphia & Reading RR. Coupons.
Quicksilver Mining Company. Coupons.
Rome, Watertown & Ogdensburg RR. Coupons.
Schuylkill Navigation Company. Interest and coupons.
Shamokin Valley & Pottsville RR. Coupons.
State Line & Sullivan RR. Coupons.
Swedes Iron Company. Coupons.
Tide Water Canal. Coupons.
West Branch & Susquehanna Canal Company. Coupons.
West Jersey RR. Coupons.
Wilmington & Reading RR. Coupons due.
West Jersey Marl and Transportation Company. Coupons
Union & Titusville RR. Coupons.
Philadelphia & Erie RR. Coupons.
Western Penn. RR. Coupons.

COAL COMPANIES.

Block House Mine Co. Coupons.
Canneiton Coal Co. Coupons.
Consolidation Coal Co. Coupons.
Cumberland Coal and Iron Co. First-mortgage coupons.
Dade Coal Co. Coupons.
Delaware & Hudson Canal Co. Interest.
Eureka Coal Co. Coupons due.
Holliday Coal Co. Coupons.
Lehigh Coal and Navigation Co. Interest.
Lykens Valley Coal Co. Coupons.
Pevtona Cannel Co. Coupons due.
Philadelphia & Reading Coal and Iron Co. Interest.
Reading Coal and Iron Co. Coupons.
Saltsburg Coal. Interest.
Shamokin Coal Co. Coupons.
Susquehanna Coal Co. Coupons.
Union Coal Co. Coupons.

Gas Stocks.

NEW YORK, Thursday Evening, July 3, 1879.

Quotations of gas stocks are very much unsettled in consequence of the reductions, which we note elsewhere, in the price of gas, and a general gas war seems imminent. All the New York stocks are lower, excepting Municipal, which stock shows an improvement of $5 per share.

The New England Association of Gas Engineers will hold its semi-annual meeting at Providence, R. I., on August 28th.

From our foreign exchanges, just to hand, we note that an unusual number of the gas companies of Great Britain are announcing reductions in the price of gas. The tendency of gas shares is also to better prices.

Bids for Lighting Detroit.—On June 10th the bids for public gas in Detroit were opened. The Detroit Gas-Light Company offered to light the City Hall at $2 per thousand; the Mutual offered to light the Central Market at $2.25 per thousand. For lighting the streets both companies made the same bids—4-ft. burners, $19 per annum; 2-ft. burners, $13 per annum, on the basis of 2000 hours per lamp. On a basis of 2250, they offered to supply the 4-ft. burners at $1.50 per thousand, and the 2-ft. ones at $12.10 per annum. These figures include cleaning, lighting, and extinguishing. The naphtha lamp bids varied from $15 to $10.45 per annum.

The Philadelphia *North American* cites Boston and Baltimore as proofs that their city should get gas for less than $2.15 per thousand.

In a letter to the Cleveland *Leader*, a correspondent notes twenty-three explosions of the oil lamps now in use in that city, all of which occurred in one evening.

The Reading (Pa.) *Eagle* of June 11th says that some New York parties, whose office is on Liberty street, have asked permission to lay pipes in Reading, and furnish gas at $2 per thousand, 15 per cent reduction to the city.

Edison's Electric Light.—LONDON, July 1.—Mr. Edison's London patent agents filed on Saturday the final specification for a third and most important English patent on the subject of the electric light, which relates to an electric lamp or burner of platinum, or of an alloy of platinum.

Cost of the Electric Light.—The report of the Chief Engineer and the Consulting Chemist of the Metropolitan Board of Works, on the experiments with the electric light on the Victoria Embankment, London, shows that the cost of the Jablochkoff ignited carbons was 5⅞d. (11½c.) each per hour; cost of gas equivalent to electric light in opal globes, by which the light was diminished 59 per cent, 2d. (4c.) per hour; the same with a frosted or granulated globe, in which the electric light was diminished 29·9 per cent, 3·50d. (7c.) per hour. The conclusion comes to is, that, the amount of illumination in both cases being equal, the electric light costs 1⅞ times as much as gas. This result, though not so stated, must be regarded as approximate, it being admitted that the means do not exist of an accurate estimate of the amount of light given out by the electric and ignited carbons. It is noted that the most favorable projection of electric light is upward.

Reduction of Gas Bills.—The reduction of their tariff rates by a group of our city gas companies is encouraging alike to consumers and the gas interest. The promptitude with which what may almost be considered joint action has been taken by two of the companies—the Manhattan and the New York Mutual—partakes of the nature of a surprise, though there is no question that enlarged consumption, such as will prove remunerative, must follow. A legislative measure, designed to favor the public, which compelled gas companies to charge a uniform rate, stood in the way of any disposition on the part of a company to reduce rates; the subsequent alteration of the law, however, rescinding this provision and providing for a graduated scale of prices and, further, allowing to each company freedom of action, has placed matters on quite a different footing. Our citizens have had the first result in the starting, some two years since, of the Municipal Gas Company, which laid its pipes in different sections of the city, entering even the domain of other companies, and which, by the reasonableness of its rates and the quality of its light, has given very general satisfaction. Whether from the effect of this competition, or the anticipation of a larger consumption that in itself would prove remunerative, or from both causes, the old companies have followed suit, the Metropolitan having reduced its rates in September last to $2.25 in quantities up to 30,000 feet, with a further reduction for larger quantities, coming down to $1.75 for 50,000 cubic feet and upward, and the Harlem Company in October last coming down from $2.75 per 1000 cubic feet to a uniform rate of $2 per 1000 feet to the consumer. "So far so good," for the stock of these companies by no means suffered from such reduction. This week the Manhattan Company makes the announcement of a reduction to $2 per 1000 cubic feet under 10,000 per month and $1.90 for a higher amount, with additional reduction to larger consumers. The New York Mutual has notified its patrons that the price of its gas will be $2 per 1000 cubic feet, and $1.90 for higher consumption, and less to large consumers. The Municipal, which charges a uniform price of $2.40 per 1000 feet, has taken no action as yet, and the Metropolitan has up to the present moment announced no change. Following on these late reductions, comes the following squib, presumably from the Municipal head-quarters, intended, as Artemus Ward would say, to read ironic, though it is difficult to say whether it is written in the wrathful or grimly humorous mood:

TO CONSUMERS OF GAS—GREAT REDUCTION IN PRICES.

OFFICE OF THE MAGNIFICO RUSH-LIGHT CO.,
No. 4 RIP VAN WINKLE PLACE,
NEW YORK, June 27, 1879.

This company respectfully informs its customers and the public generally that for the past forty years it has endeavored to supply them with light, and by the arrogance and incivility of its officers to maintain a monopoly of the lighting business.

A new company having recently started to supply a gas said to be made from water (?), this company finds it necessary, in order to try to maintain its monopoly, to reduce the price of gas; and, therefore, to simplify its business and to make it easily understood by its customers, it has from this date adopted a scale of prices—forty two in number—so arranged that a consumer of 9600 cubic feet of gas per month will be compelled to pay more than a consumer of 10,000 cubic feet, and so on, with a still greater reduction to larger consumers—on the principle that the poor man should always pay more than the rich man for the necessaries of life.

The officers of this company having made themselves masters of the gas business some twenty-five years ago, feel confident that they have all the improvements that existed then, and also feel sure that no improvements of any kind have since been made in the science of making gas or in any other science, and they will always in the future, as in the past, furnish the best light that can be made by any of the processes which were in vogue twenty-five years ago. GENERAL BOUM, President.

PIFF PAFF POOM, Secretary.

Coupons and interest on the bonds of the following companies fall due during the month:

Brookline Gas-Light Co. Dividends.
Champaign Urbana Gas-Light Co. Coupons.
Chelsea Gas-Light Co. Dividends.
Joplin Gas and Coke Co. Coupons.
Lawrence Gas, Coke, and Coal Co. Coupons.
Milwaukee Gas Co. Coupons.
Omaha Gas Co. Coupons.
Sioux City Gas Co. Coupons.

AUCTION SALES:

Metropolitan Gas Co.—215 shares, at 127@126¼.
Manhattan Gas Co.—13 shares, at 163½@167.
Boston Gas Co.—9 shares, at 78¾@785.
Charlestown Gas Co.—Par $50, 72½@72¾.

The following list of Companies in New York and vicinity is corrected weekly by GEORGE H. PRENTISS, Broker and Dealer in Gas Stocks, No. 24 Broad street, New York

COMPANIES IN NEW YORK AND VICINITY.	Capital Stock.	Par.	DIVIDENDS. Rate per ann.	DIVIDENDS. Am. of last.	DIVIDENDS. Date of last.	QUOTATI'NS Bid.	QUOTATI'NS As'd.
	$		P. ct.				
Mutual, N. Y....	5,000,000	$100	6	1½	Apr., '79	60	65
" Bonds...	90,000	1,000	6	3½	Feb., '79	98	103
N. York "	4,000,000	.....	8	4	May, '79	95	99
Metrop. "	2,500,000	100	10	5	Feb., '79	120	124
" Certfs..	1,000,000	.....	7	3½	Feb., '79	100	103
Harlem "	1,850,000	50	6	3	Feb., '78	40	50
Manhat. "	4,000,000	50	.....‡	5	June, '79	170	180
Brooklyn, Bkln.	2,000,000	50	15	5	May, '79	120	127
Nassau	1,000,000	25	.....‡	3	Jan., '79	55	65
" Certfs...	700,000	1,000	7	3½	May, '79	92	96
People's.....	1,000,000	10	...‡	3½	Jan., '76	18	22
" Certfs....	300,000	1,000	7	3½	Jan., '79	70	75
" Bonds....	300,000	.....	7	3½	May, '79	90	96½
Metrop. "	1,000,000	100	5	2½	May, '79	40	50
W'msb'g "	1,000,000	50	8	1½	Apr., '79	70	80
" Certfs...	1,000,000	.....	7	3½	Jan., '79	85	92
Citizens'.....	1,200,000	20	...‡	3	Jan., '79	55	65
" Bonds...	315,000	1,000	.....	3½	Apr., '79	95	100
J. C., N. J.....	750,000	20	10	7½	Jan., '79	135	145
Municipal, N. Y.	2,000,000	100	12	3	June, '79	125	130
" Bonds..	750,000	100	7	3	May, '79	105	110
.....	.....	.....	.....	.....	.....	.....	.....

THE ALPINE SILVER MINING CO.,

OF COLORADO.

Capital Stock, $2,000,000. Par Value of Shares, $10.

FOREVER UNASSESSABLE.

DANIEL J. SPLANE, President. **J. L. THOMPSON, Secretary.**

The property of the Company consists of **twelve mines and mining locations,** located in Lake County, Colo., in the vicinity of Leadville, upon all of which extensive work has been done, in all cases exhibiting true fissure-veins, good pay streak, and well-defined lodes.

Three of the leading mines are well opened up, and have at the lowest computation **over ten thousand tons of ore in sight.** The Railroad now under construction will be within a short distance of the property.

The Superintendents estimate that one of the leading mines, when the work is fairly under way, will yield the Company a net income of over $1000 per day. The Company has placed in the Treasury Five Hundred Thousand Dollars (50,000 shares of the stock), 20,000 shares of which will be sold at $1.50 per share, when the price will be advanced. All orders mailed *prior* to the advance will be filled at present price.

Application for the stock can be made to the office of the Company,

Room 37, 61 Broadway, or to J. L. THOMPSON, Third Nat. Bank, New York.